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THE MEDICAL JOURNAL OF AUSTRALIA

(With which "The Australasian Medical Gazette," and "The Australian Medical Journal" are incorporated.)

The Journal of the Australian Branches of the British Medical Association.

VOL. I.—3RD YEAR—No. 12. SYDNEY: SATURDAY, MARCH 18, 1916. PRICE 6D.

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Refer to Note issued by Dr. Robert Hutchison to face Page 470 of his book, "Food and the Principles of Dietetics," Third Edition, Revised and Enlarged, Second Impression, 1913.

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THE MEDICAL JOURNAL OF AUSTRALIA.

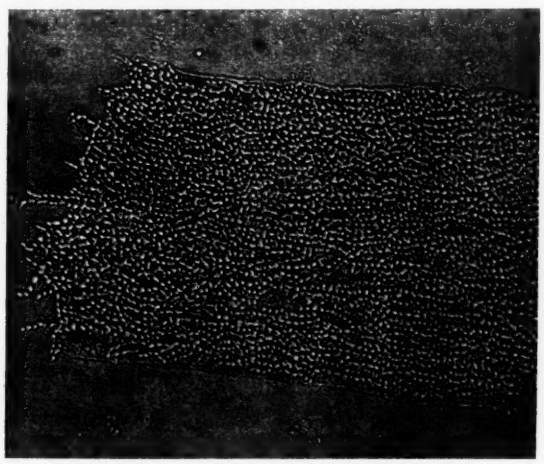
VOL. I.—3RD YEAR. SYDNEY: MARCH 18, 1916. No. 12.

THE OCCURRENCE OF RINGWORM OF THE SCALP IN SYDNEY.

By **Norman Paul, M.B., Ch.M.,**

Honorary Assistant Dermatologist, Sydney Hospital.

With the object of investigating the various types of ringworm of the scalp, I collected a series of 34 cases, and made both microscopical and cultural examinations. This number is not a large one in comparison with similar records made in London, but then *tinea tonsurans* is relatively a much more prevalent disease in the metropolitan hospitals of London than in similar institutions in this city. Fourteen of the cases were found to be due to microsporons, nineteen to endothrix *trichophytons*, whilst one was caused by the ectothrix fungus. The cultures showed that the small spored ringworms were due to the *Microsporon audouini*, as well as to microsporons of animal origin, *i.e.*, *Microsporon lonosum* and *Microsporon felineum*. Amongst the endothrix cases *Trichophyton crateriforme* occurred most frequently, especially that culture exhibiting a primrose colour. *Trichophyton acuminatum* accounted for several cases, but the violet culture, *Trichophyton violaceum*, did not occur in the series. The majority of these endothrix ringworms occurred in private patients, and often several members of a family were affected.



Hair invaded by endothrix *Trichophytons*.

Though *tinea tonsurans* is not often seen after puberty, in two case adults were affected. Both cases occurred in women, and both were due to the endothrix fungus. *Trichophyton crateriforme* was the causative agent in one, whilst the other presented itself as a typical and extensive black dot ringworm, and was due to *Trichophyton acuminatum*.

Reviewing the foregoing, it will be noticed that the *Microsporon audouini* does not hold the same place as it does in London, where it is the cause of over 90% of the juvenile ringworms. Morris states: "Prevalent in the north-west of Europe generally, the *Microsporon audouini* is met with most frequently of all in England, south of the Loire it becomes rare, and it is scarcely ever found in Italy or in Spain, in Denmark, or in Sweden, in Germany or in Austria. On the other hand the microsporons of animal origin seem to be of almost universal distribution." The endothrix fungus is found to constitute under 10% of the cases in London, whilst here it is the cause of over 50%. The relative frequency of the microsporon and endothrix fungus in Sydney practically corresponds with that found by Sabourand in Paris. Colcott Fox, however, observed for a time after the commencement of the first ringworm school in London (1901-1902) by the Metropolitan Asylums Board, that 40% of the cases admitted were due to endothrix trichophytons. This proportion rapidly fell till in 1908 it stood at 14%. Doubtless immigration from England will have some influence on the present proportion, just as the Italian immigration into South America has done.

NOTES ON THE SUCCESSFUL TREATMENT OF ULCERATIVE GRANULOMA PUDENDI BY MEANS OF TARTAR EMETIC.

By **A. Breinl, M.D.,**
and
H. Priestley, M.D., Ch.M. (Syd.),

From the Australian Institute of Tropical Medicine, Townsville.

Ulcerative granuloma is a complaint, which is prevalent amongst the aborigines of North Queensland and the Northern Territory, and occurs to a greater extent still amongst the natives of Western Australia. Until recently the treatment has generally proved difficult and unsatisfactory. The crude method of applying fuming nitric acid and other caustics to the granulating surfaces invariably gave rise to extensive cicatrization, and, except in early cases, was seldom effective. The complete excision of the granulomata proved, even in early cases, difficult, and recurrences were frequent. Sometimes, after prolonged periods of apparent cure in these cases, new foci appeared suddenly, and the patient therefore had to be kept under observation for a considerable time before a definite cure could be pronounced. Advanced cases can be treated neither with caustics nor by excision, since the lesion nearly always spreads into the vagina and rectum, and extensive strictures would result from the latter treat

ment; late cases were, therefore, up to recently, incurable, and the patients died a miserable death.

Of drugs, mercury and soamin in our hands, and salvarsan in the hands of others, have proved ineffective, as far as the actual lesions are concerned, but have led to considerable improvement in the general health.

X-ray treatment has been recommended, and several observers claim excellent results. We were, however, unable to confirm this observation in two advanced cases under our care. After the application of the rays for a period of over four weeks, the surfaces of the lesions began to heal, and cicatrization had apparently set in. Shortly after the discontinuance of the treatment, the patients re-entered the hospital, showing granulations as extensive as before X-ray treatment was commenced, and it was impossible to judge how far the apparent improvement was due to X-rays, and how far to general hygienic measures as douching, etc.

Aragao and Vianna (1913)[1] published an account of the excellent results obtained from the use of intravenous injections of tartar emetic in ulcerative granuloma cases. Their experiments did not attract general attention, and, up to the present, no confirmatory evidence has been recorded.

Tartar emetic as a parasiticide was introduced by Plimmer and Thomson for the treatment of trypanosomiasis in 1907. Gaspar Vianna (1913)[2] used tartar emetic intravenously in dermal leishmaniasis, and it has since been administered in kala-azar by Di Christina and Caronia[3] and Rogers.[4]

A Queensland aboriginal girl, about 20 years of age, suffering from extensive ulcerative granuloma, entered the hospital, and offered an opportunity of verifying Aragao and Vianna's results. No definite history as to the duration of the disease could be obtained, but by all appearances she had been suffering for a number of years. The examination showed that the whole external genitalia were involved in the granulomatous process, and that it had spread into the vagina and along the perineum into the rectum.

The patient was kept under observation for five weeks, and general hygienic measures only employed, in order to gauge the rate of spread of the disease. It is well known that in untreated cases the ulcerative process may come to a standstill, or even show temporary improvement, only to be followed later by exacerbations. In spite of the frequent antiseptic douches and strictest cleanliness, the ulcerating surfaces did not show any sign of healing, but continued to exude a copious, fœtid discharge, proving that there was no tendency towards spontaneous improvement when treatment was commenced. The diagnosis was beyond doubt, since the regional lymph glands were not enlarged (they are as a rule involved in syphilitic lesions), and the characteristic Donovan bodies were found in great numbers in the discharge and in scrapings from the sore.

The Donovan bodies of ulcerative granuloma, named Calymma bacteria by the Brazilian observers, differ from the Leishman-Donovan bodies of kala-azar and Oriental sore. When mature, they resemble in appearance large capsulated cocci, are oval in shape, and possess a single nucleus, and usually occur intracellularly. In their earlier phases they are in more than one respect similar to the earlier developmental stages of Chlamydozoa as they form zooglœa-like masses within the cytoplasm of endothelial cells.

Tartar emetic was administered in the same way as advocated by the South American observers. For the first injection, 0.06 gram of tartar emetic was dissolved in 30 c.cm. of sterile saline solution, and injected intravenously by means of a large hypodermic needle attached to a funnel and tube. A small amount of normal saline was injected first, in order to make certain that the needle had penetrated into the vein, and was followed by the tartar emetic solution, and then by saline again, in order to prevent any antimony solution from entering the tissue at the site of injection. For the second injection, 0.08 gram and for the third and following 0.1 gram was used. In this way seven injections were given in seventeen days, and, in all, 0.64 gram of tartar emetic was administered. It was, unfortunately, practically impossible to continue the intravenous injections; the surface veins of aboriginals are very small, and, in the girl in question, the superficial veins of the arm were hardly noticeable. Moreover, the injections had apparently caused a thrombosis of the small veins at the site of injection. After the seventh injection, in spite of comparatively extensive dissection, no superficial vein of the arm large enough to allow of the free flow of fluid, could be found. It was, therefore, decided to administer the drug *per rectum*, since subcutaneous or intramuscular injections nearly always lead to extensive abscess formation. The rectum was thoroughly washed out with water, then a high rectal enema of 50 c.cm. of saline, containing 0.2 gram of tartar emetic was administered. These injections were well borne, readily retained, and did not give rise to any irritation. In this way, nine injections were given in the course of twenty one days.

The first three intravenous injections caused vomiting, which set in soon after the solution began to enter the vein; it was not severe, and ceased within a few hours. The subsequent injections, however, did not cause any inconvenience.

The effect of the injections was remarkable. After the treatment was begun, the secretion from the granulomata increased considerably, but the fœtid odour became less pronounced, and the patient complained of itching in the affected parts. Already after the second injection a distinct improvement set in; the edges of the sores began to cicatrize, and, after two weeks, the whole granulating surface was covered by a soft, whitish, epithelial layer, except at the upper part of the right labium minus, where a piece of tissue had previously been removed for microscopic examination. This small area was the last to heal, showing thus that tartar emetic had acted as a specific remedy.

The treatment has resulted in a temporary cure at least, and the patient was able to leave the hos-

pital 14 days after the last injection Only observation over a more prolonged period will prove whether the cure was complete.

We are well aware that definite conclusions as to the value of the drug can not be obtained from one case, but only from a large series of cases observed for a prolonged period. The success in this one case, however, entirely confirms the observation of Aragao and Vianna, and justifies the recommendation of a further trial of this drug for the treatment of ulcerative granuloma.

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[1] Aragao and Vianna—*Memorias do Instituto Oswaldo Cruz*, Tomo V., Fac. II., 1913.

[2] Gaspar Vianna—*Boletim da Sociedade Brasileira de Dermatologia*, Anno II., No. 1, 1913.

[3] Di Christina and Caronia—*Bull. Soc. Path. Exot.*, Vol. VIII., 1915.

[4] Rogers—*Brit. Med. Jour.*, p. 197, July 31, 1915.

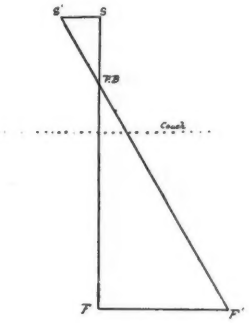
NOTE ON THE LOCALIZATION OF FOREIGN BODIES BY X-RAYS.

By **W. L. Kirkwood, Major, A.M.C., A.I.F.,**
Wollongong, New South Wales.

The recognition and localization of foreign bodies formed an important part of the X ray work on the No. 2 Australian Hospital Ship. They were in every case metallic, and included rifle bullets, shrapnel bullets, fragments of shell and fragments of bullet cases. The procedure adopted was that of Captain E. N. Keys-Wells, R.A.M.C., of the 3rd London General Hospital, to whom I am indebted for much kindness and guidance in X-ray work during my stay in London. It is yet another modification of the methods of Walsh, Hampson, McKenzie Davidson and others. Keys-Wells uses the patient's skin on which to mark the projection of the image, instead of the fluorescent screen or the photographic plate. In greater detail the method is as follows:—

The diaphragm attached to the tube box under the couch is reduced to small dimensions and centred accurately under the foreign body with the guidance of the fluorescent screen. A metallic probe is passed between the screen and the part under examination, and moved about on the patient's skin until the shadow of its point on the screen coincides with that of the foreign body or of a definite corner of the foreign body, if the latter be large. The probe is held steadily in position on the patient's skin, while the room is lit up. The screen is removed and the position of its point is carefully marked on the skin surface. This is exactly over the foreign body, and an incision carried the correct depth cannot fail to find it. The depth remains to be calculated. The diaphragm is opened up and the tube moved under the table for a distance of ten centimetres. The metallic probe is used as before, and moved about until the shadow of its point coincides with that of foreign body once more. The position of the point of the probe is again marked on the skin. The distance between these points is now measured by dividers and noted. The depth beneath the skin (X) is calculated by means of the following formula:—

$$X = \frac{SS^1 \times FS}{SS^1 + FF^1}$$



The distance from anticathode (F) of the tube to the top of the couch (C) is carefully measured and noted every time the tube under couch is changed. The distance from the couch to the vertical point on the patient's skin (S) is measured for each patient. These two distances added together gives the total distance (FS). All of those measurements are made in centimetres. FF^1 is known to be 10 centimetres. SS^1 is known from the measurement made by the dividers. The calculation remains to be done. A mark is now made on the patient's skin, outlining the projection of the fragment on it as seen with the central ray in the position FS. Carbol fuchsin is the stain selected, as it remains easily visible after several applications of tincture of iodine, the favourite skin antiseptic. Boracic fomentations, however, remove it very rapidly, and marking ink is recommended for use in such cases. The fragments should be removed as early as possible after they have been localized, although the stain will remain visible for at least three days. If the fragment is deeply placed, or there are anatomical difficulties in the way of an approach by an antero-posterior route, the patient is turned on the side, and a lateral projection made in a similar manner. If the fragment is large, it is well to determine the depth of each end separately.

The taking of antero-posterior and lateral views is often helpful both to the radiographer and the surgeon, but cannot be relied on for accurate localization.

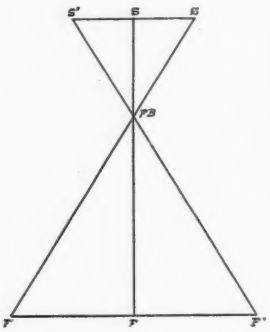
Stereoscopic radiography is also useful, and is as accurate as the method described, if careful measurements are taken, and calculations made accordingly. As in the former method, an indelible mark should be made on the skin vertically over the foreign body, or one of its extremities. A plate is then fixed in position in a plate carrier, fitted with a cross wire above the part. The tube is moved three centimetres to the right of the central position, and a picture is taken. The plate is changed and the tube moved three centimetres to the left of the central position, and a picture is taken. The distance of six centimetres is selected, as this is approximately the average interpupiliary distance of the observer.

The distance from the anticathode to the plate (FS) is carefully measured, and the distance from

the plate to the mark on the patient's skin is also measured. After the plates have been developed, a tracing of one of them is made on tracing paper of the cross wires and the image of the foreign body. The tracing is now transferred to the second plate and adjusted upon it in such a manner that the cross wires of the tracing and those of the second plate correspond. The image of the foreign body on the second plate is now traced on the tracing paper.

The distance between the foreign body as traced on the tracing paper (S^1S^{11}) is now measured, and the distance of the foreign body from the plate is calculated from the formula:—

$$X = \frac{S^1S^{11} \times FS}{F^1F^{11} + S^1S^{11}}$$



The distance from the plate to the mark on the skin must now be subtracted from the result, and the remainder will be the depth of the foreign body beneath the skin.

Meanwhile, a permanent stereoscopic record has been made of the relation of the foreign body to the adjacent bones. The important feature of this method is the accurate marking of the patient's skin where the shadow is projected on it by the central ray; for valuable as stereoscopy is, it is extremely difficult to transfer accurately the mental idea conveyed by even a stereoscopic picture to the part at the time of operation.

If stereoscopic pictures are not required, a double picture may be taken on one plate, the distance between the images on it measured, and the depth of the foreign body calculated from the data already mentioned. The sources of error are fewer in this method than in the stereoscopic method, and the hands of the operator are less exposed to the action of the rays than in the method of Keys-Wells, a very important consideration.

There may be difficulty as to the reproduction of the same position of the part on the operating table as it occupied on the X-ray couch. This is best got over by arranging the part in the X-ray room in such a manner that (1) it lies in a position of rest, or (2) the guiding mark is situated, if possible, at the highest point of the curvature of the limb. In none of the cases operated upon was there any difficulty in finding the fragments.

I am indebted to Lieutenant-Colonel A. B. Brockway, O.C., No. 2 Australian Hospital Ship, for permission to publish these notes.

Reports of Cases.

DEATH DURING INDUCTION UNDER A GENERAL ANÆSTHETIC.

By **R. W. Hornabrook, M.B., M.R.C.S.,**

Honorary Anaesthetist, Melbourne Hospital, Women's Hospital, Melbourne, Eye and Ear Hospital, and Dental Hospital.

The following case is of interest to anæsthetists:—

On February 4, 1916, at 9.35 a.m., at the Women's Hospital, Melbourne, a student was administering an anæsthetic to Mrs. N. F., married, aet. 35 years, under my supervision. The patient was a fairly anæmic woman, having lost a good deal during the past three weeks; her pulse-rate was 100, and respiration 24. I would not describe her as an unhealthy and nervous subject for anæsthetic work. She was perfectly quiet, and I did not see why she should not take her anæsthetic without any serious trouble.

I gather from her son, aged 17 years, whom I saw later on this morning, that she had complained more than once that she thought she had a weak heart, and also that she had told the Sister of the ward she was in that she did not think she would get through the operation; this latter thought is, however, quite an ordinary one.

The administration of the anæsthetic was commenced about 9.35 a.m., a few drops of ethyl chloride, about 2 c.cm. followed by a few drops of chloroform, about 10 to 15, on an open mask of one layer of flannel, followed by ether.

The patient took the anæsthetic quite quietly at first, but after about two minutes' induction she started to move her legs up and down, and also raised her right arm. She made no attempt to remove the mask, and the struggle was by no means a severe one, no force being required to restrain her. She then held her breath, and I immediately told the student to stop his anæsthetic, as it is during these stages that the patient is liable to take a sudden deep breath and a concentrated dose of the anæsthetic, with the result that cardiac, or respiratory inhibition occurs. It was while she was holding her breath that I noticed a sudden change, and saw that the heart had failed. I drew the patient over the end of the table, opened her mouth, and she took several deep breaths, but it was evident from her blue white colour that the heart was not acting, and in spite of all efforts nothing could be done, and the heart refused to respond to any stimulus. This patient had also slight enlargement of the thyroid on the left side.

I consider her death was entirely due to the strain thrown on a weak heart by holding her breath. Under ordinary conditions it would have made no difference, but the fact of holding her breath caused congestion, and this throws an extra strain on the heart, and if abnormally weak it may not be able to stand the strain.

It is possible that if I had started this patient with a more extreme elevation of the head and shoulders there would have been no trouble, for I would not then have been working on so congested a brain, and the slight struggle that took place, and the holding of the breath would not have occurred, with the consequent strain on a weak heart.

I am of the opinion that neither the ethyl chloride, chloroform or ether was the direct cause of this patient's death, but that the death was due to the fact that owing to the comparatively low position of the head, on a stretcher sagging at the head end, the congested state of the brain, brought on by the anæsthetic, caused cerebral excitement; this led to a certain amount of struggling and holding of the patient's breath; the holding of the breath (which means in other words asphyxiation) caused a strain on a diseased heart that it was unable to stand. In an ordinary case this slight extra strain would not have made the slightest difference, but in this case was probably the difference between life and death.

Post-mortem examination, 11 a.m., February 5, 1915. The patient was anæmic, but well developed. Marked enlargement of the middle and left lobes of the thyroid; small cystic condition; normal appearance of the right lobe. Uterus: Whole cervix involved in a breaking-down cancerous mass; fundus apparently clear; enlarged cancerous pelvic glands on the right side. Heart: Left ventricle con-

tracted; right auricle and ventricle very flabby, the auricular wall being very thin.

The patient had a heart that could not stand any severe strain. She was a fairly heavy drinker. In spite of the condition revealed *post-mortem*, I think that it is quite possible that if the patient during induction had been put under with the head and shoulders raised at a natural angle of from four to six inches, so that the tendency to excessive engorgement of the brain during induction had been avoided, the slight struggle that took place, and the holding of her breath might have been avoided, and a fatality would not have occurred. It was the little extra strain thrown on a heart that was unable to stand any extra strain that killed her.

The difference in comfort and ease with which an anæsthetic is taken, with the head low, that is on the level, and when raised a few inches at a natural angle, can only be fully appreciated by those who have taken an anæsthetic in the two positions. With the head low there comes over the patient a feeling of fullness and throbbing in the head, almost as if it was going to burst, and there naturally comes over the full-blooded person a tendency to fight against the anæsthetic. With the head and shoulders raised a few inches at a natural angle, so that there is no kinking of the neck, the taking of an anæsthetic when properly administered is quite a pleasant sensation, and a drift into unconsciousness. Speaking from personal experience, in a number of cases and under various conditions, I am quite an easy subject to put under the influence of an anæsthetic when either standing up, sitting upright in a chair, or with head and shoulders well raised, but with the head on a level with the rest of the body, a very difficult and strongly resisting patient.

The same facts were noticed with regard to several of the seamen and stokes on the H.M.A.S. *Australia*. Whereas a man would take an anæsthetic quite quietly sitting up in an armchair, which was the method generally employed for short anæsthesias of a few minutes' duration, the same patient would cause trouble if put straight down on the operation table without elevation of the head during induction.

At the Melbourne Dental Hospital during the past nine years and five months 25,668 general anæsthetics have been given, without a single fatality, and in this hospital it is the custom to give all the anæsthetics with the patient sitting upright in the dental chair. All classes of cases are given general anæsthetics there, and I have never yet had to send a patient away because I considered he or she was an unfit subject to take an anæsthetic. In two cases epileptiform fits have been excited by the administration of the anæsthetic; one was a patient from one of the epileptic homes, and the other a child with a family history of epilepsy. In the latter case, the attack was very mild. There was also the case of an old woman of 63, who was noticed to be hemiplegic when she came out of the anæsthetic. There have been a few cases where the patient has seemed a bit faint after the anæsthetic, but merely placing them flat on the floor was all that has been required to bring them round. Of the 25,668 administrations, 23,865 have been either ethyl chloride or somnoform alone (by the open or semi-open method), or, in a few cases, in conjunction with ether or nitrous oxide. There were 11 straight-out chlorform cases, 51 ethyl chloride, chloroform and ether, and 91 ethyl chloride and ether (open).

In conclusion, I would strongly advise all anæsthetists to see that when they are inducing general anæsthesia their patient is comfortable, with the head and shoulders raised on a gentle slope. The induction is then simpler, quieter, and far more pleasant for both patient and anæsthetist, with less likelihood of a severe strain on a weak heart.

A CASE OF LIPOMA GROWING FROM THE SHEATH OF THE ULNAR NERVE.

By **Alan Newton, M.S. (Melb.),**
Surgeon to Out-Patients, Melbourne Hospital.

A simple tumour of any considerable size is now a surgical curiosity, for few growths are permitted to remain long unmolested.

The lipoma represented in the accompanying photograph was unusually large, and was also remarkable in that it was attached to the sheath of a peripheral nerve.

The history of the case is as follows:—

A.B., male, aged 18, school teacher, had noticed a swelling in the palm of his left hand since he was three years of age. It had increased in size slowly and painlessly, and had become so large that it caused almost complete loss of function of the hand. He consulted Dr. Edgar Barrett, who sent him to the Melbourne Hospital for surgical treatment.

On examination, a large lobulated tumour was seen on the ventral surface of the hand and the forearm (see Fig.).

There were three divisions of this tumour. Of these, the largest was placed medially to the central portion of the palmar aponeurosis. The second lobule was situated ventrally to the thenar eminence, and on the ulnar border of the forearm, immediately to the proximal side of the annular ligament of the wrist, was a third lobule, smaller than the swellings in the palm.

The whole tumour was definitely encapsuled, and was somewhat adherent to the skin.

Owing to the size of the tumour, the range of movement of the fingers was very limited.

An incision, with its convexity upwards, was made in the palm, and from its centre a vertical incision was made, terminating about the middle of the forearm.

On division of the deep fascia, the tumour was found to be a lipoma. It was divided into three lobules by the palmar fascia and the annular ligament. Further dissection demonstrated that the tumour was intimately attached to the sheath of the volar ramus of the ulnar nerve from its origin in the forearm to its termination in the palm by its division into superficial and deep rami. The lateral lobule of the lipoma, which was in relation to the thenar eminence, did not accompany the deep ramus, but was an extension of the tumour between the palmar fascia and the flexor tendons.

The nerve trunk was dissected out of the substance of the lipoma, and the latter removed. The functional result was very satisfactory.

The pathologist's report was as follows:—

On microscopical examination, the tumour proved to be made up of typical adult fat cells, with nuclei situated peripherally. The stroma was composed of fibrous tissue, which was somewhat in excess of that usually seen in sub-

cutaneous lipomata. The vessels were somewhat thick-walled, but there was no evidence of endothelial activity. Macroscopically, the whole tumour was made up of tissue similar to that sectioned for microscopical examination. No nerve tissue was found in the sections examined.

Bland-Sutton[1] states that occasionally a fatty tumour arises from a nerve sheath. There is a specimen in the museum of the Middlesex Hospital, which grew from the sheath of the median nerve as it entered the palm.

Vickery succeeded in removing a lipoma weighing 12½ ounces from the thigh of an infant nine months old. The tumour grew from the sheath of the great sciatic nerve, and, before operation, simulated a sarcoma.

I am indebted to Dr. J. I. Connor for the pathological report of this tumour.

Reviews.

S. WEIR MITCHELL.

We have received from the Smithsonian Institute[2] a volume of memorial addresses and resolutions delivered and passed at a joint meeting of various societies in Philadelphia after the demise of a great physician. Marcus Antonius said:

"The evil that men do lives after them;
The good is oft interred with their bones."

The world of medicine, of science and of literature have had no evil to say of Weir Mitchell; the eulogies of the man, the practitioner, the scientist and the poet are warm and loving in praise. It is rare that medical men are endowed with the gift of elegant language. Rarer still is it that a dozen should produce in one volume tributes to a common friend, full of harmony, of literary skill and excellence, and of profound earnestness. Of those who have acquaintance with Weir Mitchell's work in neurology, in experimental science, in clinical medicine, in literature and in art this volume must compel admiration and appreciation. Those who have learned but little of this great man's achievements, the volume should instruct and awaken to admiration. It is difficult to compare the various tributes and addresses, for each has a style and a subject peculiar to itself. While the words of fond recollection and high appreciation spoken by Mr. Owen Wister of Mitchell as a poet, prose writer and novelist are of unmistakable literary value; those of Dr. G. E. de Schweinitz, the celebrated ophthalmic surgeon, are artistic. In the pages, we learn how the father's influence moulded the character of the man and directed him into those channels which have given utility to his genius. We learn how Weir Mitchell was fearless in doing what he believed to be right, both from an ethical aspect and in professional matters. We are told that he was warned not to venture to be an experimental physiologist if he wanted to practise medicine, because it would lead to ruin. Mitchell scorned the advice, and later counselled young and able men to spend a few years in the laboratory, in order to prepare themselves for clinical pursuits and daily practice. The volume charms by itself, but it does more. It impels the reader to reach out his hand for Weir Mitchell's works, and to study deeply in them.

THE BLIND, AND THE DEAF AND DUMB.

On November 27, 1915, His Excellency the Governor of South Australia presided over the thirty-ninth annual meeting of the South Australian Institute for the Blind and Deaf and Dumb. The business of the meeting consisted in the presentation and adoption of the annual report, the election of the office-bearers and members of the committee, and the usual votes of thanks. The Premier spoke in terms of high appreciation of the manner in which the Superintendent and his staff had carried out the difficult duties of the institution. He referred to the new Education Bill, which would have the effect of adding to the number of pupils within the institution. The Government had offered a sum of £5,000 in addition to its annual subsidy of £1,200, provided that a similar sum was raised by the public. Sir Edwin Smith had placed the Institution in the position to benefit by this offer.

[1] Bland-Sutton—"Tumours, Innocent and Malignant," London, 1911.
[2] S. Weir Mitchell, M.D., LL.D., F.R.S., 1829-1914, Memorial Addresses and Resolution, 1914. Philadelphia; Roy. 8vo., pp. 155.

The annual report contains a record of the work of the year. The number of pupils on the roll was 84. Twelve new pupils had been admitted. Of these, two had been removed by their parents, while two girls returned to their homes after having completed their education, a third was placed in a situation; two boys were transferred to the Home at Parafield, and five were apprenticed to trades. Since its inception, the Institution had harboured 107 blind pupils and 229 deaf mutes.

The health of the pupils had remained good during the whole year. In spite of the prevalence of morbilli in the neighbourhood, no case had occurred within the building. There had been one case of enteric fever, and one of scarlatina. The Committee record their gratitude to Dr. O'Leary, the Honorary Physician, for the care and attention he had bestowed on the health of the pupils. In the chapter dealing with the educational work, it is reported that the manual class had been placed in the care of an old pupil, who had developed into an excellent teacher of the deaf. One of the teachers in the Deaf School, Mr. H. R. Hookings, resigned in order to take up the position of Senior Teacher in the Queensland Blind and Deaf and Dumb Institution. The Institution had lost a conscientious officer and capable teacher. Praise is meted out to the other teachers in both schools. Good progress has been made in the teaching of music to the blind pupils.

Five of the employees were serving with the colours. The pupils had been actively occupied in connexion with the Red Cross Society, and had organized concerts, which had resulted in substantial sums being handed over to some of the patriotic funds.

The income of the Institution has fallen off as a result of the many other calls which are being made on the charitable public. The maintenance account shows a sum of £6,610, and the final payment to the contractors for the erection of the Lady Smith Building for Boys and the Gymnasium, installation of electric light, etc., amounted to over £4,000. The year began with an indebtedness to the Bank and to the Endowment Fund of over £5,500. Added to this were several smaller items of expenditure, bringing the total outgoings up to nearly £17,000. The year ended with a debt to the Endowment Fund of over £5,000, and one to the Bank of over £1,300. It thus appears that the year's work has placed the Institution into a more unfavourable position. The extra donation from the Government, and that from the President, Sir Erwin Smith, should, however, save it from serious embarrassment.

LYSOL SUBSTITUTES.

The failure of supplies of certain drugs, antiseptics and chemicals, and the increased cost of all these articles, have impressed the necessity for local manufacture on the medical profession and on the general public. The Australian business man has availed himself of the occasion to commence the manufacture of articles for which there is a great demand. The favourable opportunity of acquiring a footing in this market should not be neglected by those anxious to increase the prosperity of the people of the Commonwealth. It is eminently desirable that manufacturers should be encouraged to place articles of sound value and high quality on our markets. Many of these articles are intended to replace products made by our enemies which have been subject to much investigation, and have acquired a wide sale as a result of the dissemination of knowledge of their properties. The examination of the characters of the products of Australian manufacturers should be conducted as rapidly as possible, in order to separate those of permanent value from those prepared for sale under the present conditions.

A preparation purporting to be a 50% solution of cresylic acids saponified with alkali has been placed on the market to replace lysol. The preparation is named trusol. This antiseptic has been subjected to special examination for *The Medical Journal of Australia*. The results of this examination show that it fulfills the expectations engendered by its label. A solution of one part of trusol in 250 parts of water has the same germicidal power as a one per cent. solution of carbolic acid in water. The antiseptic power of this solution is thus similar to those of any solution containing 50% of cresylic acids. Chemical examination supports the description given on the label. The saponification has been carried out so that the antiseptic dissolves completely in water.

The Medical Journal of Australia.

SATURDAY, MARCH 18, 1916.

Paratyphoid and Enteric Fever.

There are circumstances in which the military and the civil health authorities have duties to perform which may harmonize or clash, according to the attitude taken by the one or the other. The military authority has presumably enough to do to look after the health of the troops from enlistment until discharge, and has little time to consider the welfare of the community in general, although it is evident that it is from a healthy community that useful recruits must be drawn. A certain number of convalescent soldiers are now in the Commonwealth after having been rendered inefficient for military duty by intestinal affections. The lay public regard these affections as if they were uniformly of the nature of enteric fever, but there is evidence that a large proportion belong to the group of paratyphoid infections. We have learnt recently from the Home Secretary in the House of Commons that from the outbreak of hostilities up to the end of November, 1915, the bacteriological diagnosis of enteric fever was made among British soldiers in no less a number than 1150. Incidentally it may be mentioned that he has informed the House that the mortality among the inoculated was 6.04% and among the non-inoculated it was 20.9%.

The soldiers convalescent from one or other of these intestinal disturbances are potential spreaders of infection until freed from the causative bacillus either in the course of time or by artificial means. It is obvious that the military authority has no further direct interest in the man as a soldier who continues to harbour the bacillus in his body. If he is cast back into civil life, he becomes a source of danger to the community. The advantage of collaboration of the military authority with the health authority in this connexion is so apparent that the point need not be argued. Precautions are taken by the military authority to exclude the carrier from associating with soldiers in camp or elsewhere. Various regulations have been in force with this end in view. Recently the opinion has been expressed in England that the control of the urine of enteric fever convalescents suffices for the detection of those who harbour Eberth's or Schottmüller's bacillus. Experience of many years does not lend confirmation to this view. Bacilluria is a sign of general infection, whereas the bacilli may lie dormant in the gall bladder, and may be thrown out from time to time into the intestines without any active signs of disease. The control of the invalided soldier should therefore consist of an expert bacteriological examination of the fæces and possibly of the urine as well. Should the examination prove negative, the soldier is sent to his home for a time, and at the end of the fixed period a further test is made. Should this also prove negative the man is declared fit for duty. On the other hand, if the bacteriological examination yields a positive result, the man is ordered into hospital, and is re-examined at a later date. A positive bacteriological find is then the signal for his discharge from military service. The test should be repeated at short intervals to be of practical value. It is at this stage that the health authority should step in. The man having been proved to be a possiblbe danger to the community should be kept under control by the health authority until it is shown that he is no longer capable of conveying the infection to others. The Health Act of Victoria contains provisions for the civil control of these men. We have yet to learn that machinery has been created for the systematic examination of the fæces and urine of enteric fever convalescents, who have been discharged from military service on account of the presence of enteric or paratyphoid bacilli in their excretions. This provision would be a useful first step toward the completer control of enteric fever in the Commonwealth.

ANTERIOR POLIOMYELITIS.

The event of two epidemics of acute anterior poliomyelitis in Australasia is causing uneasiness among the community, and this uneasiness is being exaggerated by the prominence given to the subject in the lay press. The New Zealand epidemic, to which we have already called attention, is undoubtedly a serious one, and the number of deaths justifies stringent measures being taken in the attempt to cope

with its spread. Up to March 10 the number of cases was 347; the total for the past week was still considerable. It is evident that this epidemic has yet a considerable time to run before it dies out. The health authorities have a difficult task to perform to satisfy the public. Unfortunately, but little is known of the ætiology and epidemiology of this disease. The fact that it is rare for two cases to occur in one household lends strong support against the theory of direct transmission from child to child or from a carrier to a child. The schools have been closed in Auckland presumably more to allay public uneasiness than to stay the epidemic. Various guesses have been made as to the method of spread, and some of these guesses have some semblance of scientific support. But it is probable that precautionary measures are of small moment, save that they tend to improve the general health of the community and in consequence the power of resistance to the virus, whatever it may be.

In New South Wales but few cases were recorded during November and December of 1915. During the month of January, 1916, there were 41 cases, of which 38 occurred in the metropolitan combined district. In February, 50 cases were notified, and, during the first week of March, the total since January 1 has been raised to 130. Of this number, all but 20 have been reported from the metropolitan district. The number of deaths occurring in the metropolitan district has been three up to March 8, 1916. It thus appears that the New South Wales outbreak is less extensive and less fatal than the New Zealand outbreak.

Anterior poliomyelitis was proclaimed a notifiable disease in New South Wales in February, 1912. Medical practitioners are therefore required to notify all cases occurring in their practices. It is a matter of great moment that this order should be obeyed promptly in every case. Apart from the utility of notification from a statistical point of view, it must be remembered that all efforts to combat an epidemic are thwarted unless practitioners collaborate with the health authority and indicate the possible sources of infection. As soon as the existence of a case is brought to the notice of the local authority, the latter serves the householder with a copy of a manual containing advice in connexion with the disease notified. It is to be hoped that medical practitioners will take this duty seriously.

DYSENTERY.

The control of dysentery, either in epidemic form or in sporadic cases, has been favoured by the recognition of the three main forms of the disease. These different kinds of dysentery, though characterized by somewhat similar symptoms, are produced by different infective agents, which are carried from person to person in different ways. Not only must these varieties of dysentery be regarded as distinct in their infective agents and in their mode of propagation, but the treatment of the several kinds proceeds on quite separate lines. Amœbic dysentery in man is caused by a protozoal parasite, *Entamœba histolytica*, which passes through certain phases of its life history in the intestinal wall and in the lumen of the human intestine. The resistance to injury of the encysted form of the protozoon accounts for its dissemination from the human carrier who forms the link between outbreak and outbreak. The amœba in its trophic and pre-cystic forms is readily destroyed by emetin, the active principle of ipecacuanha. Although the action of emetin is less marked on the cystic stage of the amœba, ipecacuanha and its active principle may be regarded as therapeutic specifics for amœbic dysentery. Bacillary dysentery is produced by a number of micro-organisms, of which two, the bacilli of Shiga and of Flexner have been the subject of extensive study. The bacilli pass from infective persons into many sources of infection, *e.g.*, water supply, which serve to distribute the organism to many persons at once to give rise to an epidemic. The most useful mode of treatment is probably that by a specific serum for the organism involved or by a polyvalent serum made in part with the species of microbe infecting the patient.

Flagellate dysentery is due to certain ciliate infusorians, of which various species of *Trichomona*, *Lamblia*, and *Balantidium* have been identified. Little is known as to their paths of infection, and less as to specific methods of treatment. The majority of cases of dysentery due to flagellate protozoa have been noted on the East and West coasts of South America and in China. Evidence is, however, accumulating that its distribution covers a wider area, and may extend to Europe.

Our knowledge of amœbic dysentery has been extended by the investigation by Walker and Sellards and of Sellards and Baetjer. Walker and Sellards succeeded in proving that the infective agent of amœbic dysentery in human beings is the encysted form of *Entamœba histolytica*. Human beings may also be infected with encysted forms of *Entamœba coli*, but this amœba has been shown to be without pathogenic action on man. In consequence, it soon dies out from the intestine. Sellards and Baetjer succeeded in producing typical dysentery in cats by the intracaecal inoculation of material from human fæces. They found that injury to the intestinal wall was unnecessary to produce dysenteric lesions in the

intestinal mucosa. When the intestinal wall was injured by scarification or by other means, the dysenteric lesions did not appear at the sites of injury. These observations are of interest, since all previous attempts to inoculate animals by means of rectal enemata and by feeding them had yielded a low percentage of infection. By intracaecal inoculation infection is produced invariably. The lesions of amœbic dysentery in man are confined to the large intestine, and do not extend upwards beyond the ileocaecal valve. In this respect there is a marked distinction from bacillary dysentery, in which lesions are not infrequent in the small intestine.

Although there are certain characters in the stools which are usually associated with each type of dysentery, the appearance of the stools is mainly dependant on the nature of the food, the age of the patient, the length of time the chyme has remained in the intestine, etc. For diagnostic purposes, attention to the character of the mucus present is desirable. In amœbic cases the mucus is white and glairy, like the white of an unboiled egg, streaked with blood and often swimming in a yellow serous fluid. Such mucus is stated by some authors to be absent from cases of bacillary dysentery in which green, bile-stained mucus or red mucus is present. Green or red mucus often occurs in cases of amœbic dysentery. In examining stools, it is of diagnostic importance to wash them with water, otherwise sloughs may be readily missed. Microscopical examination for the parasites is essential. A recent author affirms of these cases that a routine microscopical examination of the fæces should be as much a part of a clinical examination as the use of the stethoscope, the clinical thermometer, or the examination of the blood or urine.

Flagellate dysentery is likewise diagnosed by microscopical examination of the fæces. Bacillary dysentery requires the identification of the infective microbe in cultures made from the stools. Numerous media have been used in this connexion. A typical culture medium would be litmus-lactose-agar, on which characteristic colonies are formed. Sub-cultures are made from likely colonies into broth, and the young broth cultures used for agglutination tests with sera freshly prepared by inoculating rabbits with standard cultures of the different bacilli causing bacillary dysentery. In this way the species of the infective bacillus is quickly and surely identified. In some cases immune protective sera prepared against the bacilli have been employed for the agglutinating diagnostic tests. Great care has to be exercised when this is done, and Ledingham and others have found samples of immune sera that were useless for this purpose. So impressed is Ledingham with the possibility of error when these methods are employed for diagnostic purposes that he advocates the separation of the various species by fermentation tests. Some attempts to determine the nature of the infective bacillus in individual cases have been made by examining the agglutinative power of the patient's serum against the various bacilli of dysentery, and by the method of hæmoculture. The diagnosis of bacillary dysentery and the identification of the species of bacillus present is easy when an examination of the fæces is made within a few hours of the onset of the disease. It is difficult, and may be impossible, a day or more later.

Although amœbic and bacillary dysenteries have been discussed as separate entities, it should be remembered that bacillary dysentery may supervene on amœbic dysentery, and that bacillary infection often precedes a fatal termination.

A PUBLIC DANGER.

Early in February the Director-General of Public Health of New South Wales issued a circular letter to medical practitioners throughout the State, calling their attention to the practice, which there was reason to believe existed of sending patients suffering from notifiable infectious diseases to and from hospitals in trams, trains and other public conveyances. The medical practitioners were called upon to discourage this practice as far as possible, and to persuade those patients who were being sent to hospitals to remain in their homes until the arrangements for their removal and admission had been completed. On March 3rd a man was charged at the Central Police Station with having travelled by train while suffering from scarlatina. The plea of ignorance of the law forbidding this act was not accepted, and the defendant was fined £5 and 6s. costs, or, in default, sentenced to a month's imprisonment. It was pointed out that a person suffering from an infectious disease within the meaning of the Public Health Act, 1912, is required to observe certain precautions before he may use a public conveyance. The precaution prescribed is to notify the Station Master that he is suffering from an infectious disease. It is obvious that compliance with the law is essential for the control of notifiable diseases. When ignorance is pleaded by a sufferer, it is patent that common sense has not been utilized. Medical practitioners sometimes have to supply this commodity to their patients.

PARKES DISTRICT HOSPITAL.

In the Annual Report of the Parkes District Hospital for the year 1915, the Committee records that 443 patients were treated in the wards during the year. Of these, 421 were admitted as fresh cases. The number of patients remaining in the hospital at the end of the year was 26. Thirty-four patients died, and 383 were discharged. In four instances the condition for which the patients sought relief was unrelieved. Improvement was attained in 48 cases. As no medical report is attached, it is impossible to analyse the medical and surgical work accomplished. In addition to the indoor work, 107 persons were treated in the out-patients' department.

The Committee records its sincere regret at the death of the Senior Medical Officer, Dr. H. O. Johnson.

Praise is accorded to the Matron for the splendid manner in which the funds of the institution have been guarded. Thanks to her skilful management, the expenditure has been reduced by over £150. The average daily number of patients in residence was 23.15, and the average length of residence was 20.4 days. The average cost per patient was £66 3s. 5d.

The maintenance account shows an expenditure of £2,074, and an income of £2,408. A balance of £77 was brought over from the previous year, and that carried over to 1916 was £412. The Government subsidy amounted to £673, which is equivalent to about 28% of the total income.

Abstracts from Current Medical Literature.

OPHTHALMOLOGY.

(101) Papillœdema in Gun-shot Injuries of the Skull.

Walter H. Jessop has found that papillœdema was present in 72% of the cases of gun-shot injury to the vault of the skull coming under his notice (*Ophthalmoscope*, December, 1915). He excludes the terms choked disc and optic neuritis, as the condition is due to œdema of the papilla and nerve sheath, resulting on increased intracranial pressure. It is doubtful whether the process is an inflammatory one, even to toxic conditions, or whether the term papillitis is justified. The swelling was found to be slight, 1 D or 2 D; both discs were affected, were pinkish in colour, with indistinct and blurred edges. There was often a distinct narrow, yellowish white ring around the disc, evidently an œdematous effusion. Hæmorrhages were rare, as were masses of effusion. The vision was not affected in the majority of the cases. After the intracranial pressure had been relieved, the papillœdema disappeared rapidly. The author is not convinced that papillœdema can occur without a fracture being present. Lister, however, is of opinion that it may follow brain concussion or cortical hæmorrhage. Jessop states that each case should be carefully watched, and, when necessary, the intracranial pressure should be relieved by operation.

(102) Congenital Word and Letter Blindness.

Though only 64 cases have been reported, T. R. Whipham considers that *alexia congenita* is more common than is usually supposed (*Ophthalmoscope*, January, 1916). It is more prevalent in boys than in girls, the frequency being 47 to 17. More than one member of a family may be affected. The author's patient was a healthy girl of eight years, whose intelligence was moderately good, although perhaps a little below the normal standard. Her chief difficulty was with letters, both in reading and spelling. She had difficulty with words even of two letters. "At" would at times be written "ta," and "dog" "gdo." She could write her christian and surname together, but not separately. Writing from transcription, she made curious mistakes, *e.g.*, "transcriptino," "copy writino." She had no word-deafness. Her sight was good, and there was no hemianopsia or nystagmus. The Wassermann reaction was positive. The author expresses the opinion that the lesion may have been syphilitic, and situated around the posterior extremity of the fissure of Sylvius. The visual word and letter centre is in the left supra-marginal and angular convolutions. It is difficult to explain why the right side does not take on the functions. The outlook is not quite hopeless; improvement may be expected with systematic and sympathetic training.

(103) The Diagnosis of Glioma Retinæ.

To the conditions most commonly mistaken for glioma, such as metastatic irido-cyclitis, extension retinitis, gross tubercle of the choroid and congenital anomalies, Sydney Stephenson would add another, *viz.*, *retinitis exudativa* or *retinitis haemorrhagica externa*, as differentiated by George Coats in 1908 (*Ophthalmoscope*, January, 1916). The first patient was a boy, aged 2½ years. His parents noticed a cast in the left eye, and a shining appearance, "like that from a cat's eye." The eye was blind, and there was slight ciliary redness. Areas of clear fundus could be seen here and there, interspersed with greyish white masses. The eye was enucleated for glioma and examined. Nodules of newly-formed connective tissue were found in the outer layer of the retina. The nodules contained clefts, which had once been cholesterin crystals. These crystals had been dissolved by the chemicals employed in making the preparation. The second case was that of a girl aged four years. There was a bluish grey reflex from her left blind eye. The retina was detached. Examination of the excised eye revealed an abundant homogenous coagulum in the subretinal space, containing "ghost cells" and cholesterin clefts. No glioma was present.

(104) Tumour of the Optic Nerve.

Arnold Knapp describes a case of primary tumour of the optic nerve, which he treated by removal with preservation of the eyeball by Krönlein's method (*Archives of Ophthalmology*, November, 1915). The patient was a boy aged nine years, who had been suffering from an increasing prominence of the right eye. The proptosis was straight forward; the motility of the eye was normal. No tumour was felt on palpation, and the eye was almost completely blind. The disc showed neuritic atrophy. Krönlein's operation was performed, the bone flap being reflected with the osteotome and mallet. When exposed, the mass in the orbit had a bluish colour. The optic nerve was divided behind the eyeball, and the mass removed as far back as possible. Six months later the position of the eye was normal and the motility outwards restored. Microscopical examination of the mass showed that there was a general neuroglial proliferation, with myxomatous-like degeneration. These tumours are most frequently neuro-fibromata.

(105) Malignant Uveitis.

James Bordley defines malignant uveitis as a slowly progressive chorio-cyclitis, which begins with photophobia and is characterized by subsequent loss of sight (*Archives of Ophthalmology*, November, 1915). Exudates appear upon the posterior corneal surface, in the form of small dots near the inferior border and larger plaques with opaque centres and translucent edges. Dilatation of the pupil and a greenish colour of the iris are early symptoms. A large number of cysts were seen, with the aid of a lens, on the bulbar conjunctiva in cases described by the author. The vitreous cloud took the form of a dotted veil, which became denser at a later date. The retinal veins were engorged, and the tension, which had been normal at first, increased for a time, and then fell below normal. In some of the cases recorded, the Wassermann reaction was positive, and in others it was negative. In all cases there was a positive tubercular reaction. The treatment employed included the exhibition of mercury, iodide of potash and pilocarpine. Sweat baths were given. Subconjunctival injections merely effected a relief of pain. The most useful drug was thyroid extract. Eight patients were treated in this way. In four the treatment was successful, in two the result was doubtful, and in two it failed. The author describes five cases in some detail, illustrating the effect of the treatment on the vision by means of charts.

(106) Penetrating Injury to the Eye from Broken Spectacle Glass.

Stephenson reports the case of an eye being injured by a broken lens in a woman (*Ophthalmoscope*, October, 1915). The patient was 34 years of age. On stooping to pick up an article on the floor, she struck the right lens of her spectacles upon the newel of the staircase. On examination, a few hours later, a small iris prolapse was found, midway between the centre of the cornea and its outer edge, slightly below the transverse meridian of the eye. Slight haziness indicated that the lens was wounded. There was no anterior chamber. Two months later the eye was quiet, with a small anterior synechia. There was a streaky opacity from the wound into the lens, and the vision was $^{2}/_{24}$. The sight could be improved by operation on the lens. The author has seen only two other cases of similar nature. One was a lad, who wore glasses, one of which was broken by a stone. The prolapsed iris was excised, and the case did well. In the second case, a lad was allowed to play football with his glasses on. One lens was broken, but the only consequence was an excised conjunctiva, which soon healed. One authority gives the incidence of such accidents as 5 in 150,000 patients.

LARYNGOLOGY AND OTOLOGY.

(107) Intranasal Treatment of Frontal Sinus Suppuration.

O. T. Freer gives a full and critical description of the intranasal opening of the frontal sinus for chronic suppuration, based on anatomical and physiological studies. The article is illustrated for the purpose of illuminating the anatomical relations of the various

structures involved (*Laryngoscope*, December, 1915). The author points out that up to the year 1905 the intranasal method was regarded as too dangerous to be attempted. The ostium is bounded in front by the *crista nasalis interna*, internally by the expanded portion of the anterior superior nasal spine, externally by ethmoidal cells lying between the ostium and the lachrymal bone and posteriorly by the foremost of the anterior ethmoidal cells. The first act in the operation is to pass a probe into the frontal sinus. To do this, the ethmoidal cells must be traversed. At times the probe cannot be passed. Various plans have been devised. The author recommends the division of the anterior attachment of the middle turbinate bone or the resection of its anterior half. The uncinate process may be cut away to expose the *bulla ethmoidalis*. A small ring curette is then passed through the lowest part of the bulla, and the anterior cells are removed by the cutting edge, which is directed obliquely upwards, outwards and forwards. The instrument is worked through the sinus floor into the sinus, behind the *crista nasalis interna*. If the bone is too hard to penetrate in this manner, a special probe curette is passed through the sinus ostium and the passage is enlarged posteriorly until a larger curette can be employed. All the cells under the orbital plate are removed. The author dwells with precision on the dangers of improper curetting, and describes the best means of removing the ethmoid cells and entering the frontal sinus. When there is reason to anticipate the cicatricial closure of the sinus opening, a self-retaining rubber tube may be employed. The author has devised this tube, and also many intruments, for the purpose of carrying out the operation. If marked suppuration persists after the intranasal operation, the external operation must be resorted to. When great swelling of the lids, exophthalmos or cerebral symptoms, indicating caries of the sinus wall and ulcerative frontal sinusitis (Killian) exists, the intranasal operation should not be attempted.

(108) Chronic Maxillary Sinusitis.

R. H. Skillern discusses the operative treatment of chronic maxillary sinusitis, and guides the practitioner in his management of these cases (*Journ. of Laryng., Rhin. and Otology*, January, 1916). In determining whether an operation should be undertaken, the general condition of the patient, the history of the condition, the probable pathological changes and the environment, age, etc., of the patient should be taken into consideration. When the patient is unable to follow his occupation on account of pain, disturbed sleep, profuse discharge, intermittent fever and general illness, immediate evacuation by means of needle puncture should be undertaken. The patient should be kept in bed, ice should be applied locally and a brisk purge given. The question of operation should be postponed for a time. When the condition has lasted for several years and the discharge becomes profuse and the headaches severe, it may be assumed that it will be resistent to ordinary treatment. Needle puncture, with lavage, should be continued as long as there are any signs of improvement. At times, the condition becomes stationary, and may be then further improved by the application of alcohol (50%) or silver nitrate solution (6% to 25%). In the event of acute exacerbations occurring, the patient should be required to choose between conservative and operative treatment. In 20% of all cases, suppuration of the antrum is dependent on dental changes. In this form the disease is very chronic. The offending tooth should be removed and free drainage established. The proper treatment cannot be determined until the probable pathological conditions of the mucosa and osseous walls has been determined. The condition of the mucosa can be judged from the consistency of the secretion, from the amount of resistance to lavage and from the radiographic appearances. The occupation, social conditions, age and sex of the patient must also be taken into consideration. When the disease is of dental origin, the old Cowper operation should be performed. The opening should be kept patulous by means of a suitable plug. In other cases, when conservative treatment has proved ineffective, or when there are direct indications for radical treatment, the Caldwell-Luc or the Denker operation should be undertaken. Both are equally effective. When conservative irrigations have failed to effect a complete cure, the preturbinal method is advisable. In young ladies in good social position some form of conservative operation is usually preferred to the more radical procedures.

(109) Primary Tuberculosis of the Pharynx and Larynx.

J. B. Horgan (*Journ. of Laryng., Rhin. and Otology*, January, 1916) describes a case of primary tuberculosis of the pharynx and larynx in a clergyman, aged 69 years. The patient complained of hoarseness of two months' duration, and of dysphagia. He had lost weight and strength. The right pharyngeal tonsil was hypertrophied and congested, and had a septic fissure running in its vertical axis The lingual tonsils were slightly enlarged. The arytenoids were pear-shaped and œdematous. The ary-epiglottic folds were œdematous, and the epiglottis was swollen to twice its normal size. The vocal cords were seen with difficulty. They were slightly congested and moved freely. A physician reported that no physical signs of pulmonary disease were present The right tonsil was enucleated under local anæsthesia. After a short time the condition became very much worse, and purpura hæmorrhagica appeared. He died a fortnight later. A portion of the epiglottis and tonsil had been removed for histological examination, and proved to be typically tubercular. showing caseous areas and giant cells.

(110) Columnar-Celled Carcinoma of the Ethmoid.

J. B. Horgan publishes a short account of an unusual ethmoidal condition (*Journ. of Laryng., Rhin. and Otology*, January, 1916). The patient, a man, aged 29, was seen in July, 1912, for nasal obstruction and purulent discharge from the right nostril. There was a chronic empyema of the right antrum, and suppurative ethmoiditis. Denker's operation was performed, the lining mucous membrane of the antrum was entirely removed and the right ethmoidal labyrinth was totally exentrated. Toward the end of September all signs of active suppuration had cleared up, and, with the exception of some slight crusting in the previously affected area, the disease was apparently cured. Three months later the patient complained of blocking of the right nostril, headaches and epistaxis. A fungating mass was seen filling the nostril. The pathologist's report was typical columnar-celled carcinoma. Under general anæsthesia the right ethmoidal region was approached by the external incision suggested by Moure. The growth extended upwards to the cribriform plate, and externally to the *lamina papyracea*. The removal was accomplished without difficulty. The patient recovered, and remained free from recurrence up to the time of reporting.

(111) Tonsillectomy by Blunt Dissection.

J. B. Horgan (*Journ. Larnyg., Rhinol. and Otology*, December, 1915) has removed close on 200 tonsils under local anæsthesia by blunt dissection, and speaks enthusiastically of the operation. The patient is given an injection of morphine and atrophine, and the fauces are anæsthetized with 10% solution of cocaine and adrenalin. The tissue around each tonsil is then injected with novocain solution, up to 15 c.cm. being used. The needle should be straight, and should not penetrate more than 1 or 2 mm. After the injection, the tonsil has a shrunken appearance, surrounded by a pale, œdematous collar. The voice may be indistinct or lost, and, should this be the case, the surgeon should reassure the patient. The patient is kept in the sitting posture, with the face directed slightly downwards. The tonsil is then grasped with Halle's forceps, and the swollen anterior pillar is drawn aside. A McKenzie's blunt dissector is passed into the extra-tonsillar region. First the dissection is made in the anteroposterior direction; an upward sweep will free the upper pole, and, if necessary, the lingual pole may be freed with scissors. The advantages of this method are the avoidance of general anæsthesia, the avoidance of vomiting and of extensive hæmorrhage, and the ease with which it can be carried out. The patient is kept in bed for at least three days.

THE WOUNDED IN NAVAL WARFARE.

While the experiences of military surgeons in action and in camp have been published in almost every medical journal throughout the world during the past year and more, those of naval surgeons have only come to light on rare occasions, and then have embraced the time when the British Navy has been engaged in looking for the ships from Kiel. It may be that our ships will have the great good fortune to find a part or the whole of the German fleet one day, and that our surgeons will have an interesting story to tell. The details[1] published by Surgeon Leonard Darby, Senior Medical Officer of H.M.A.S. *Sydney*, of his experience during and after the engagement between the *Sydney* and the *Emden* are of such unusual interest that we offer no apology for the length of this abstract.

On November 9, 1914, at 7.30 a.m., instructions were given to get everything ready below and to prepare for action, as a strange warship was supposed to be about 50 miles distant, at the entrance of Cocos Islands. The stations for the stretcher-bearers were situated at the fore and aft ammunition lobbies. Two theatres were prepared in stokers' bathrooms, well separated from one another. These rooms were 12 feet by 8 feet by 7 feet, and were supplied with hot and cold water. They were not quite below the water-line, but were well protected by armour, coal bunks and two decks. Two days before the action one of the theatres had been cleared and the room painted. There was only just enough time to get the equipment back into the theatre before the action began at 9.30 a.m. Six adjoining bath-rooms were cleaned up as rapidly as possible, in order that they might be used as shelter places for the wounded. The water supply was augmented by an emergency supply in the captain's and wardroom galley, further aft. This proved very useful, because, when the guns had been firing for ten minutes, the water came through the bathroom taps black, muddy and useless.

At 9 a.m., Surgeon Darby inspected the first-aid bags at the gun and control stations, and also the sick bay. Before he could get below to his station the *Sydney's* guns opened fire.

Within 5 or 10 minutes from the commencement of the action the first wounded man was brought below. He had a fracture of the right leg and 13 shell wounds. While morphine was being injected, a stream of wounded came down. The second man was badly wounded. He had been shot through the chest, and was bleeding freely. There was a loud inrush of air through the wounds, and he was suffering from marked air hunger. Several other serious cases required immediate attention. In one case the man had been shot through the abdomen, in the left hypogastric region. Fragments of the missile had emerged in the right lumbar region. About eight inches of omentum was hanging out of the wound. The patient was burnt from head to foot. One man was shot through the base of the heart, and died within a short time. Soon all the available space near the theatre was occupied. Surgeon Darby therefore gave orders that the members of the stretcher-bearer party were to give first-aid and to convey the wounded men to the wardroom. One of the last men received in the theatre had had the left foot shot almost completely away. A message from the Captain was received that there was a wounded man on the upper bridge. By this time the *Emden* was not so dangerous, and, fortunately, no damage had been done to that part of the ship where the wardroom was. The wounded men were soon dressed and placed in beds, or on blankets in the wardroom or on deck. Surgeon Todd, who was in charge of the other theatre, had been equally busy up to this time. After Surgeon Darby had visited his colleague, he returned, to find that the wounded man from the bridge had been brought down on a Neil-Robertson stretcher, which is especially adapted for conveying patients up steep ladders, through small hatchways and along narrow passages. The patient had sustained a severe injury to his left thigh, the limb having been shot away at its junction with the trunk. He had lost a great quantity of blood, and was almost dead when brought into the theatre. With Surgeon Todd's assistance, his clothes were cut off and he was placed on the operating table. An attempt to save sufficient tissue to make a flap followed the injection of normal saline fluid. Before this was completed the man died.

The action terminated at 11.15 a.m. The surgeons had been working below for two hours in a confined atmosphere, at a temperature of 105° F. The wardroom contained 11 patients, the majority of whom were restless and in pain. The author suggests that the morphine, which was kept in solution in phials, had deteriorated. Further injections were given. The wounds were kept moist with mercuric chloride solution for the purpose of cleansing. Picric acid dressings were also found useful as first-aid applications in cases of burns.

During the action, the space below had been very congested. Under ordinary circumstances there was little room in this part of the ship. They did not know how the action was going. The continual fire of the guns was heard all the time. Once the ship appeared to heel over suddenly, "and the operating table took charge." It seemed as though the ship had been badly hit. It reality she had changed her course somewhat suddenly.

Two of the patients claimed the attention of both surgeons. Normal saline solution was administered, the wounds were re-dressed, and every means of reducing shock were resorted to. One of the men died after enduring much pain two hours later. The other improved somewhat, but his pulse remained weak, and there was free oozing of blood from his wounds.

The wardroom was rapidly equipped as a hospital, and the first-aid party did excellent service as nurses. As soon as practicable, the sick bay was prepared as an operating theatre. The preparation was no easy task, since the place was flooded with water. Some confusion ensued owing to the lack of room and the speed at which the work was carried out.

All through the afternoon and evening German sailors were being picked out of the water. Some of them were in a very collapsed state. It thus became impossible to do any surgery until the following day. Apart from other reasons, the condition of the wounded rendered it inadvisable to operate on the 9th. The wants of the patients were attended to until midnight, and then the two surgeons took four-hourly watches, while the nursing was undertaken by volunteer nurses and the first-aid party. Early next morning they arrived at Cocos Island Cable Station, and, having ascertained the extent of damage to the vessel, they took on board the Eastern Extension Telegraph Company's surgeon, Dr. H. S. Oilerhead. The *Sydney* then sailed back to the *Emden*.

Delay was experienced in getting the instruments re-sterilized and in obtaining sterile towels and other necessaries. There was a marked deficiency in trained assistance. Later in the day, the surgeons organized a theatre staff of volunteers. These men behaved excellently, although they had had no previous experience of operations. The first case attended to was one of a thoracic wound. Surgeon Todd administered the anæsthetic, and Dr. Oilerhead assisted Surgeon Darby. A small fragment had entered the chest in the right axilla, and had tracked downwards and forwards, emerging at the apex of the heart. There was much blood in the pleural cavity. A search for bleeding points was made after the wound had been enlarged. The search could not be prolonged, and gauze was packed into the cavity. A subcutaneous injection of saline solution was given. The patient rallied at first, but later he died of recurrent hæmorrhage. The next patient had received a fragment in the left calf, just below the knee joint. A smaller wound was found in the inner aspect of the right thigh. Numerous smaller wounds were situated in the buttocks and back. The fragments were not found. The wounds were cleaned, syringed out with peroxide of hydrogen and plugged with iodoform gauze. The patient did well, in spite of the fact that a radiogram taken later revealed numerous fragments of shell in the right leg.

The *Emden* was flying distress signals on November 11. About 80 wounded Germans were taken off under great difficulties. In addition, one surviving German surgeon was taken on board. The wounds of the Germans, who had been wounded from 24 to 30 hours before, were all septic, with

[1] *Journal of the Royal Naval Medical Service*, July, 1915.

maggots ¼ in. long crawling over them. The best arrangements possible were made for the reception of these men and for their treatment. All blankets and beds were drawn from store, and many of those on board were left without their own beds and blankets. The two surgeons attended to the more serious cases, and gave directions for the simpler dressings of other wounds. An attempt was made to keep the sick bay clear for operations, but the wardroom soon became so packed and the corridors and adjacent spaces were so fully occupied that it was necessary to use the sick bay as a dressing station. In addition to the wounded, there were 100 prisoners and 20 Chinamen from the sunken collier. From 35 to 40 of the Germans were seriously wounded. It was only possible at first to do urgent work, and to sort out the cases. Operations were discontinued at noon but were started afresh at 6 p.m., and continued until 4 a.m. on November 12. The first case was a German whose right leg had been almost severed above the ankle joint. He did well after amputation. The *Sydney's* own men then claimed the attention of the surgeons. In some cases the condition was very serious. One man had thirteen separate wounds in the right buttock, thigh, leg and foot. Both bones were fractured two inches above the ankle. A large area in the left groin had been torn out, exposing the femoral vessels and spermatic cord. The wounds were cleaned up with soap and water, peroxide of hydrogen and iodine. All accessible foreign bodies were removed, and iodoform drains were inserted. The patient was in much pain. All dressings were undertaken for a fortnight under anæsthesia. He was nursed in the Commander's cabin. The leg was saved. In the case of another sailor of the R.A.N., a shell wound of the size of a crown piece was found below the twelfth rib on the left side. He had had retention of urine, and the catheter withdrew pure blood. The wound was cleaned up. The wound, which was foul, was opened up, and an attempt was made to trace the fragment. Drainage was resorted to. The hæmaturia was less on the following day, and the man made a good recovery.

After the theatre had again been cleaned, instruments, etc., prepared, and fresh dressings procured, the surgeons began operations on the German sailors. One patient had a horribly offensive gangrenous wound in the middle third of the right leg. He had lost much blood, and the infection was spreading up the veins of the thigh. The leg was amputated above the knee. He made a good immediate recovery, but died of heart failure on the following day.

Shortly after this it was necessary to land Dr. Oilerhead at Cocos Island. His assistance had proved of the greatest value. The *Sydney*, after having been in the neighbourhood of the *Emden* for 48 hours, sailed off to Colombo at the rate of 20 knots.

On November 11, one of the *Sydney's* men was attended to in a prolonged operation. The man had sustained a wound shattering the left foot from a bursting shell. Numerous fragments were buried in the tissues of the left leg and thigh. The wounds were offensive by this time. They were cleaned up with peroxide of hydrogen, alcohol and ether. As much shell as possible was removed. The left foot was amputated at the transverse tarsal articulation. He did well.

The difficulties were increased by the fact that half the staff was *hors de combat*. The sick berth attendant was overcome at one of the operations, and had to go on deck for an hour to recover. Another man had numerous shell wounds in the hand and leg, and a small fragment in his eye. The splinter had penetrated the upper lid, and had carried a piece of orbital bone into the globe. There was suppuration, and it was determined to remove the organ. He made a good recovery. A German had his arm amputated on accouut of a mutilating wound of the forearm, both vessels having been severed. Another had a similar but even more severe wound in the forearm. He had had a tourniquet applied, and had been washed overboard. He swam ashore, and was taken on to the *Sydney* after having been on land for 40 hours. He had, in addition, a large flesh wound of the left thigh. The wounds were septic. His stature and physique were magnificent. He was the only man on the upper deck saved. Circular amputation through the middle of the arm was performed. For some days this patient had high fever, due to the erysipelatous condition of the wound in the thigh.

At midnight, after having attended to other patients, the two surgeons went to bed. They had had a spell of over 40 hours without any sleep. On the 12th, the work of attending to severe and mild injuries was continued, and by night all the operations had been completed, and the big work done. The author describes the work of organizing the hospital and of feeding and nursing the patients. By nightfall the German surgeon and Surgeon Darby began the work of sorting out the patients, who could be transferred to an armed liner which had been sent to assist the *Sydney*, and relieve them of the 230 extra men. On the following day they succeeded in transhipping 60 patients and 100 prisoners within two hours. Eighteen of the Chinamen were also sent off. All the wounded men of the *Sydney* and the more severely wounded of the Germans were retained. A fresh supply of blankets was obtained from the liner, and the septic, soiled blankets and bedding were thrown overboard. The work from this time was easier, since there was more room. By November 14 every patient had been thoroughly overhauled. The ship arrived at Colombo at 10 a.m. on the 15th, when the military took over the wounded, placing them in the Station Hospital and in the Civil Hospital.

The last act of the adventure consisted in the disinfection of the *Sydney* and of some of the bedding, etc. Much was destroyed.

Public Health.

THE HEALTH OF NEW SOUTH WALES.

The following notifications have been received by the Department of Public Health, New South Wales, during the week ending March 4, 1916:—

	Metropolitan Combined Districts.		Hunter River Combined Districts.		Remainder of State.		Total.	
	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.
Enteric Fever ..	42	2	10	1	29	4	81	7
Scarlatina	58	1	4	0	97	0	159	1
Diphtheria	126	2	10	0	84	4	220	6
C'bro-Sp'l Menin.	1	2	0	0	0	0	1	2
Infantile Paralysis	7	0	0	0	7	0	14	0
Tuberculosis.. ..	20	3	0	0	2	0	22	3
Malaria	1	0	0	0	0	0	1	0

INFECTIOUS DISEASES IN VICTORIA.

The following is a summary of the returns of three notifiable diseases for the period 1911-1915, and illustrates the incidence and mortality of these important conditions:—

Year.	Enteric Fever.			Diphtheria.			Scarlatina.		
	Cs.	Dths.	%	Cs.	Dths.	%	Cs.	Dths.	%
1911 ..	1,303	95	7.3	5,120	237	4.6	442	4	0.9
1912 ..	1,122	98	8.7	5,289	257	4.8	492	6	1.2
1913 ..	1,127	95	8.4	5,367	245	4.5	243	6	2.4
1914 ..	1,195	106	8.8	4,868	211	4.3	389	2	0.5
1915 ..	958	86	8.9	4,463	203	4.5	754	12	1.5

INFECTIVE DISEASES IN QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the week ending March 4, 1916:—

Disease.	No. of Cases.
Scarlet Fever	7
Phthisis	9
Typhoid Fever	60
Diphtheria	27
Cerebro-Spinal Meningitis	2
Erysipelas	5
Varicella	2
Malaria	1
Total	113

INFECTIVE DISEASES IN WESTERN AUSTRALIA.

The following notifications have been received by the Department of Public Health, Western Australia, during the week ending February 26, 1916:—

District.	Diphtheria. Cases.	Enteric Fever. Cases.	Phthisis. Cases.
Fremantle	—	—	3
Subiaco	2	—	—
Perth	1	1	2
Queens Park	1	—	—
Meenaar	—	1	—
Wagin	—	—	1

THE HEALTH OF VICTORIA.

The following notifications have been received by the Department of Public Health, Victoria, during the week ending March 5, 1916:—

	Metropolitan. Cs.	Metropolitan. Dths.	Rest of State. Cs.	Rest of State. Dths.	Whole State Cs.	Whole State Dths.
Diphtheria	49	2	58	2	107	4
Scarlatina	9	0	5	0	14	0
Enteric Fever	4	0	18	1	22	1
Pulmonary Tuberculosis	21	4	11	2	32	6

The following is the number of cases of cerebro-spinal meningitis reported to the Board during the week ending March 5, 1916:—

	Metropolitan Area. Cases.	Rural Districts. Cases.	Totals. Cases.
Military	—	—	—
Civil	4	4	8

Vital Statistics.

SYDNEY AND NEWCASTLE.

The returns of the births and deaths registered in the metropolis of Sydney during the month of February, 1916, have been published in the *New South Wales Government Gazette*, No. 44.

There were 1,677 births registered during the month, 862 being boys and 815 girls. The birth-rate, expressed as an annual rate, is 26.4, which is only slightly below the corresponding figure of the previous five years. The highest birth-rate recorded during the last 12 months was in March, 1915.

Of the children born, 108 were illegitimate. The illegitimate birth-rate, expressed as an annual rate, is 1.68. This rate is considerably lower than the corresponding rate for the previous five years, and the monthly rate is lower than the average for the past 12 months. In 16% of all the births the delivery occurred in hospitals or other public institutions.

The number of deaths registered within the metropolis was 638. The death-rate is equivalent to an annual death-rate of 10.08, which is 9% above the average of the corresponding figures for the preceding five years. The increase appears to have affected all but infants under one year of age, and persons of 65 and over. The total mortality has varied considerably from month to month during the last year. The highest rate was in November, 1915, when it was 1.15, and the lowest was in April, when it was 0.74. In February, 1915, it was 0.69. The number of deaths of infants under one year of age is 120. This represents 72 per 1,000 babies born. The infantile mortality in the month of February during the past five years has averaged 77. The number of persons who died at the age of 65 or over was 137, which is also smaller than the average. Forty-four per cent. of the deaths took place in hospitals and other public institutions.

The causes of death are tabulated in the usual manner. Diseases of the cardio-vascular system was responsible for 109 deaths. Among these there were 62 from organic diseases of the heart, 18 from cerebral hæmorrhage, and 18 from diseases of arteries, including aneurysm. Of the infective diseases, diarrhœa and enteritis was the most prolific cause of death. There were 71 deaths from this cause, 58 of which were of children under two years of age. Tuberculosis comes second, with 39 deaths, 29 of which were instances of pulmonary disease. The third on the list is pneumonia, with 36 deaths, 22 being lobar and 14 lobular. The number of deaths from pneumonia is considerably higher than that of February in the preceding 10 years. In 1912 it was as low as 7. On the other hand, bronchitis appears to have killed fewer persons in February, 1916, than in the same month of 1907, 1911 and 1913. There were 7 deaths from enteric fever, 9 from diphtheria, 4 from pertussis, 3 from erysipelas, 2 each from morbilli, dysentery, septicæmia and cerebro-spinal meningitis. There were 7 deaths from simple meningitis and 6 from acute rheumatism. There were 2 deaths from anterior poliomyelitis. One death from tetanus has been recorded.

There were 59 deaths due to malignant disease. Bright's disease was responsible for 49 deaths, and acute nephritis for one. There was one death from an illegal operation, three from puerperal septicæmia, two from puerperal albuminuria, with convulsions, one from puerperal hæmorrhage, and one from "other accidents of childbirth."

The infantile deaths include 24, ascribed to premature birth, 9 to congenital debility, icterus and sclerema, 8 to congenital malformations, 2 two injury at birth, 1 to hydrocephalus, and 3 to other diseases peculiar to early infancy.

The vital statistics of the Newcastle district for the month of February reveal that 178 infants were born, of whom four were illegitimate. The birth-rate, expressed as an annual rate, was 36.36. The number of deaths registered during the month was 64, which is equivalent to an annual death-rate of 13.08. Seventeen of the deaths occurred in public institutions. Both the birth-rate and the death-rate were higher than the average for the corresponding month of the preceding five years. The infantile death-rate was 101 per 1,000 births.

Diarrhœa and enteritis caused 10 deaths, six of which were of children under two years of age. Pulmonary tuberculosis was fatal on three occasions ,enteric fever killed three persons, and acute bronchitis and acute rheumatism killed one each. Cancer was responsible for seven deaths, and diseases of the cardio-vascular system for eight.

Naval and Military.

The following has appeared in the *Commonwealth of Australia Gazette*, No. 34, under date of March 9, 1916:—

1st Military District.

Australian Army Medical Corps—

Charles Ferdinand Marks to be Officer Commanding No. 6 Australian General Hospital, with temporary rank of Lieutenant-Colonel, and pay at rate of £500 per annum. Dated 1st August, 1915.

Captain I. Jackson, 4th (Wide Bay) Infantry, to be Staff Officer for Invalids (temporarily), with pay at the rate of £375 per annum, inclusive of all allowances except travelling, whilst holding such appointed. Dated 22nd November, 1915. Captain I. Jackson is seconded from appointment with 4th (Wide Bay) Infantry whilst holding the above appointment. (This cancels the notification respecting this officer which appeared on page 3092 of *Commonwealth of Australia Gazette*, No. 152, of 2nd December, 1915.)

2nd Military District.

Australian Army Medical Corps—

Honorary Major W. McMurray is transferred from Australian Army Medical Corps Reserve, and to be Officer Commanding, Contagious Diseases Hospital, with temporary rank of Lieutenant-Colonel, and pay as for rank of Major at rate prescribed by Universal Training Regulation 160. Dated 20th December, 1915.

Captain H. C. E. Donovan to be Senior Medical Officer, Liverpool Camp, with temporary rank and pay of Major at rate prescribed by Universal Training Regulation 160. Dated 20th December, 1915.

3rd Military District.

Australian Army Medical Corps Reserve—

Henry Newark Featonby to be Honorary Captain. Dated 10th June, 1915.

4th Military District.

Australian Army Medical Corps—

Captain G. M. Hains is granted temporary rank and pay of Major at rate prescribed by Universal Training Regulation 160, whilst holding appointment at No. 7 Australian General Hospital. Dated 1st January, 1916.

The following has appeared in the *Commonwealth of Australia Gazette*, No. 33, under date of March 9, 1916:—

Termination of Appointment.

Army Medical Corps—

Lieutenant-Colonel J. W. Barrett. Dated 28th February, 1916.

Lieutenant-Colonel H. W. Bryant, V.D. Dated 28th February, 1916.

Major F. D. Jermyn, V.D. Dated 10th February, 1916.

Major T. P. Dunhill. Dated 25th February, 1916.

Major A. Watson. Dated 7th March, 1916.

Captain E. J. F. Deakin. Dated 14th February, 1916.

Hospitals.

GENERAL HOSPITAL, HOBART.

The annual report of the Hobart General Hospital for the year ending June 30, 1916, has been presented to the Chief Secretary.

Reference is made to the deaths of two members of the Board of Management, to wit, Mr. Henry Cane and Mr. J. G. Edwards, and to the resignation of four other members, including Dr. Brooks. In July of 1914 the public account of the Hospital was transferred at the request of The Honourable the Treasurer to the Commonwealth Bank.

Dr. E. J. Roberts resigned his position of Senior House Surgeon after 12 years' service. In recognition of the valuable services rendered by Dr. Roberts, a request was made to the Government to grant him a retiring allowance. The Board regretted that the Government was unable to grant this allowance. The position vacated by Dr. Roberts was filled by Dr. T. H. Goddard, who had served as Junior House Surgeon. Dr. G. J. Walker was appointed in his place.

Some difficulty has been experienced in the conduct of the hospital, owing to the fact that Drs. Giblin, Butler, Lyons, Crowther, Sprent, Atkins and Campbell had undertaken military duty with the forces. Dr. E. Brettingham Moore and Dr. Terence Butler consented to act as *locа tenentes* to Drs. Butler and Sprent. Shortly after the outbreak of war, arrangements were made, at the suggestion of Lieutenant-Colonel Giblin, for members of the Army Medical Corps to attend at the hospital for the purpose of receiving daily practical instruction from the resident medical staff, from the Matron and the sisters in casualty and nursing work. The Board had placed 20 beds at the disposal of the military authorities for the treatment of returned wounded and sick soldiers.

The Hospital has 175 beds, exclusive of beds placed when required on the verandahs. There were 86 patients in the Hospital at the beginning of the year. During the course of the year, 2,141 patients were admitted, and there were 118 patients still under treatment on June 30, 1915. The number of deaths was 132. The average number of patients in residence was 112. The cost per patient averaged £4 19s. 9d. This sum, however, was reduced to £3 12s. 11d. by payments made by self-supporting patients and in other ways. The gross expenditure per bed averaged £106 9s. 5d.

A table is published giving the details of the conditions treated during the course of the year. In regard to causes of death, gastro-enteritis is entered against 15 cases, pneumonia against 10 cases, tuberculosis against 6 cases, appendicitis against 4, and carcinoma against 8.

No special reports are appended, save a very short one from the X-ray Department. The list of operations embraces 636, of which 617 are said to have led to cure. The term "cure," however, appears to have been used somewhat loosely. This is especially apparent in the case of colotomy, which was performed three times, and led to "cure" twice.

The total income of the hospital amounted to £11,925, of which the Government contributed £9,600. The patients contributed £2,266. The gross cost of the establishment has increased from about £6,000 in the early 'eighties to practically double that amount. The number of patients has increased during the same period from about 1,000 *per annum* to 2,300. On the other hand, the number of deaths has only increased from about 100 to 132.

BROKEN HILL AND DISTRICT HOSPITAL.

The Annual Report of the Broken Hill and District Hospital for the year 1915 has been submitted to the annual meeting of subscribers and members.

In this report the Board of Management express regret that for financial reasons they have been unable to proceed beyond the preliminary stage with schemes for the institution of a consumption sanatorium, a dispensary for consumptives, a bacteriological laboratory for diphtheria and a venereal clinic.

During the course of the year, it has been possible to install an electric bath for the treatment of lead poisoning, and to increase the accommodation for female patients in the surgical wards.

The Board record with regret the resignation, owing to ill-health, of Dr. L. L. Seabrook, Assistant Medical Officer, after 13 years' continuous service. Difficulty has been experienced in the attempt to secure the services of two junior medical officers to fill Dr. Seabrook's position.

The report of the Medical Superintendent, Dr. Melville Birks, contains some general information. The number of patients in hospital on January 1, 1915, was 92. During the year, 1,142 patients were admitted and on December 31, 1915, there were 106 patients in the wards. It therefore appears that the treatment was completed in 1,128 cases. Of these patients, 104 died, 842 were discharged cured, and 182 were discharged relieved. The mortality is given at 9.2%. In 22 instances the patient died within one day of admission, and in a further seven cases within three days of admission. The daily average number of patients in the hospital was 79.41.

In the surgical wards, a considerable amount of work has been undertaken. The appendix has been removed 34 times, an operation for hernia has been performed 24 times, hysterectomy has been performed six times, and six patients have been subjected to surgical treatment for ectopic gestation. The total number of major operations was 188.

In the medical ward, no less than 266 cases of diphtheria have been dealt with. There were 14 deaths, which yields a case mortality of 5.26%. No information, however, is given of the day of disease on which treatment was first instituted. There were 90 cases of enteric fever, and eight deaths. There were 40 cases of pneumonia, with seven deaths, which is equivalent to a case mortality of 17.5%, and 24 cases of scarlatina, with one death. The Medical Superintendent reports favourably on the results of the electric bath treatment of lead poisoning. In all, 42 patients were dealt with in this way.

In the children's wards, 280 patients under 12 years of age were treated. A new children's ward for cases requiring isolation has been opened. On the other hand, the children's surgical ward has been used for adult female patients, on account of the insanitary condition and limited accommodation in the women's surgical ward.

No less than 1,266 patients attended the out-patient department.

The financial statement reveals a depressed condition of affairs, the indebtedness of the Board amounting to £4,248. Maintenance, salaries, wages and miscellaneous expenses cost £11,274. New buildings and equipment swallowed up a further sum of £2,765, and incidental expenses brought the total expenditure to over £15,000. The income included a Government subsidy of £5,000, subscriptions, maintenance fees and miscellaneous receipts amounting to £850. The Workers' Compensation Fund yielded £3,330. A special Governmental grant for the erection of the Children's Ward of £3,300, together with various bequests and other receipts, brought the total income to £13,500. This sum,

together with the balance carried over from the previous year, and an encroachment, amounted to £15,500. The deficit is said to have been due to the fact that instead of receiving £9,000 from the Government, the Board has only received £5,000. Since the close of the year the Government has remitted £2,000, and the opinion is expressed that when the Department has recognized the facts, the balance required to enable the Board to carry on the work of the hospital will be forthcoming.

THE ALEXANDRA HOSPITAL, HOBART.

The annual report of the excellent maternity institution, the Alexandra Hospital, in Hobart, places on record a large amount of highly useful work accomplished during the year ending on July 31, 1915. During the twelve months, 174 patients were admitted. There were 11 women in the hospital on the last day of the year under review. The number of women awaiting confinement on August 1, 1914, is not mentioned. In 161 cases the labour and puerperium were normal, and in 23 there was some abnormality. There were two cases of placenta prævia, five of adherent placenta, two of retained placenta, two of uterine inertia, and five of albuminuria. In five cases the presentation was abnormal, and twins were met with once. In all, 87 males and 89 female infants were born. One woman died of renal trouble; two patients were discharged to the Hobart General Hospital and the remaining 160 were discharged in good health.

The Committee of Management have been placed under a debt of gratitude to Drs. Gregory Sprott and E. Brettingham Moore for the able manner in which they have carried out the work of the Hospital during the year. Three members of the honorary staff, Drs. Campbell, Nairn Butler and L. Crowther, are at present on active service, and, consequently a great deal of onerous work had to be performed by the two gentlemen named.

The financial position of the Hospital is satisfactory. With an expenditure of close on £3,000, including a building and furnishing account of over £1,500, only £522 had to be withdrawn from the Savings Bank. The actual maintenance account amounted to £1,214. To meet this, subscriptions, donations, fees from patients, and fees from nurses yielded just over £1,800. In addition to this, the Government contributed £100.

GOULBURN AND DISTRICT HOSPITAL.

During the year 1915, 777 patients were under treatment in the Goulburn and District Hospital. Of this number, 39 were still in hospital at the close of the year, so that the completed records only concern 769 patients. There were 31 in hospital on January 1, 1915, and 746 were admitted during the year. The number of deaths was 42. The total mortality appears to be 5.5%. The number of patients discharged was 696; of these, 8 were unrelieved and 78 were improved. The use of the term "cured" for the remainder is usual, but is misleading. It is improbable that a case of Bright's disease can be cured, and the same may be said of cerebral hæmorrhage. There were 159 cases of diphtheria, with two deaths, which is equivalent to a case mortality of 1.26%. None of the 14 patients admitted for enteric fever died. One case of yellow fever was diagnosed; the patient recovered. Lobar pneumonia was under treatment 32 times, and was fatal three times, while there were 16 cases of broncho-pneumonia, with one death. The other diagnoses do not call for special mention.

During the course of the year, a new pathological room and a new morgue were taken into use. The old morgue was converted into an X-ray room.

These structural alterations cost £758. The income for the year amounted to £3,939, and the maintenance expenditure amounted to £3,691. In order to meet the cost of building, it was necessary to expend the balance brought forward from the previous year, and to incur a debt of £75. Of the £4,000, the Government contributed £1,647, or about 41% of the income. The patients provided £1,400, and a sum of £839 was received from the charitable public.

As a result of representations made to the Chief Secretary, Dr. Paton, the Director-General of Public Health, inspected the institution, and his attention was called to certain defects in the hospital building. The Public Works officers are preparing plans and specifications for the provision of extra accommodation for the nursing and domestic staff, the renovation of the old buildings, the erection of an out-patients' department, and a block of buildings to contain an operating theatre and various offices.

Dr. Grieve resigned his position as Resident Medical Officer to join the forces at the front. Great difficulty has been experienced in securing the services of a resident medical officer during the latter part of the year. Dr. Burkitt was elected a member of the honorary staff in August.

CASINO DISTRICT HOSPITAL.

During the year 1915, the Casino District Hospital has been maintained at a slight loss. On December 31, 1914, there was a balance of £159, and at the termination of the year this balance was reduced to £126. This unsatisfactory financial record was due in part to the effect of the war and in part to the drought. Strenuous efforts were made to stimulate the charitable public, and the Ladies Committee are to be congratulated for the excellent manner in which they have approached the problem and maintained in part the institution. A number of entertainments were organized with varying results. The most successful was a picture show, which yielded £74, less £20 for the hire of the theatre. A benefit race meeting brought in £61. At the other extreme, a concert was organized by Mr. D. B. Byrnes, and produced only 12s. The Government subsidy amounted to £600, which is equivalent to 37.3% of the total income. The patients provided £372 in fees. The maintenance of the hospital amounted to £1567.

The number of patients treated during the year was 350, which is 110 more than that treated in 1914. Of this number, 349 were admitted during the year. The number of deaths was 26.

The members of the medical staff were Dr. Belli and Dr. Waddell. Dr. Benjamin left the district to undertake military duty in June.

A scheme is under consideration for the erection of a new hospital, with increased accommodation, sufficient for the growing needs of the district. A special committee was appointed for the purpose of considering the sketched plans of the buildings, to accommodate 40 and 60 patients. It was determined to approach the Chief Secretary with the request that the Department supply specifications and all other information necessary before tenders could be called. As soon as the reply of the Minister is received, the Committee will consider the question of raising funds for the erection and equipment of the building.

THE BENEVOLENT SOCIETY OF NEW SOUTH WALES.

The Annual Report of the Benevolent Society of New South Wales contains a record of the work conducted at the Royal Hospital for Women, Paddington, at the Renwick Hospital, at the Asylum for Women and Children in O'Connell Street, and at the Out-Door Relief and Stores Department. The year has been a heavy one from the point of view of work accomplished, and the consequent expenses were equally heavy. The maintenance account shows a deficit of £2,553, but on the other hand the balance of £3,305 remaining from an old debt of £12,000 has been cleared off. In 1913 it was decided that a special effort should be made to wipe off this debt. The Premier promised that if the Society could raise £6,000 the Government would give an equal sum. The £6,000 was duly raised, and the Government carried out its part of the contract by giving £3,000 in 1914, and the balance in 1915. The contributions of the public were about £890 less than in the previous year, and the amount of subscriptions was £344 less. The total income, exclusive of moneys received from the Government, amounted to over £12,000. The Government contributed £14,061. For the first time a real £ for £ subsidy has been paid.

The amount spent on maintenance was £5,938 more than in the previous year. The increase was due largely to the

expansion of the out-door relief department, consequent on war conditions and to the increase in price of practically all commodities. In addition, the amount spent on wages has increased materially.

Royal Hospital for Women, Paddington.

The number of patients treated in this institution has increased steadily since the year of its foundation in 1901. In 1915 no less than 2,767 women received indoor attention. In 1914 the number was 2,697.

A scheme is under consideration for the erection of an up-to-date labour ward, with a modern operating theatre attached. The sum of £1,000 is required for this purpose, and several hundred pounds have already been promised or subscribed.

In the obstetric portion of the hospital, 1,416 women were admitted into the wards, and 405 were delivered outside. In addition, 562 patients were advised during the pre-maternity period. Of the 1,416 women admitted, 1,184 were confined in the hospital. Pregnancy was complicated by various conditions 167 times. Fifteen of the mothers died, 5 from eclampsia, 4 from toxæmia of pregnancy, 3 from pulmonary embolism, one from cerebral sclerosis, one from concealed accidental hæmorrhage, and one from pneumonia. There were 18 ante-partum cases of eclampsia, and five post-partum. Accidental hæmorrhage occurred six times, unavoidable hæmorrhage six times and post-partum hæmorrhage three times. In 18 cases the pregnancy was multiple. Puerperal mania was met with once, and *chorea gravidarum* once.

In regard to the labour, it appears that in 1,184 women, contracted pelvis was noted only 10 times. In 32 cases the fœtus presented by breech or foot, in eight cases there was a face presentation, and in three cases there was a transverse presentation. The brow presented once. In three cases the cord was prolapsed. Cæsarian section was required seven times, craniotomy once, version twice and instrumental delivery 79 times. In 61 instances forceps were applied during the second stage of labour on account of danger to the mother or to the infant.

The placenta had to be removed manually on 28 occasions. In six cases there was placenta prævia, central three times and marginal three times. Two of the fœtus in these cases were stillborn. In 74 cases the fœtus was stillborn. One infant has a supernumerary finger, one had talipes equinovarus, three infants had cleft palate and two spina bifida.

On 49 occasions the temperature was over 99° F. on three consecutive readings, and the pulse rate over 90.

In the External Department, seven abnormal presentations among 405 deliveries were noted. Twins were born three times. Forceps were required twice.

In the isolation ward, 14 patients died of puerperal septicæmia, two of septic pneumonia, one of missed abortion, one of acute dilatation of the heart, one of uræmia, and one of acute nephritis.

In the Gynæcological Department, 1,351 women were treated during the year. In 481 cases treatment by operation was carried out. The conditions dealt with covered the more common gynæcological conditions, as well as some obstetric ones. Malignant disease of the breast was only under treatment twice, malignant disease of the uterus occurred three times, and malignant disease of the *cervix uteri* twice. In 45 cases non-operative treatment was accorded. No less than 657 women were dealt with in the Admission Block, and 168 in the Septic Block.

The Honorary Pathologist records that two *post-mortem* examinations were carried out. Various laboratory examinations were conducted, the majority being chemical and bacteriological analyses of the urine. Of 35 blood cultures, only eight proved positive.

A large amount of work was accomplished in the Out-Patient Department, no less than 1,545 patients being treated.

The institution serves as a training school both for nurses and for medical students. During the course of the year, 43 obstetric nurses were granted certificates. Ninety-six medical students attended the hospital, one medical practitioner took a post-graduate course, and fifteen students attended the Gynæcological Out-Patient Department. Dr. Charles MacLaurin and Dr. Hugo Flecker were absent on military service.

The Renwick Hospital for Infants.

The value of the work undertaken in the Renwick Hospital for infants is recognized both within the profession and without it. This Hospital was founded in 1911 for the treatment of sick infants, and in 1912 an "infant consultation" in Paddington was taken over by the hospital staff and converted into an out-patient department for sick infants. At present there is accommodation for 65 infants within the wards of the hospital. During the course of the year, 612 infants were admitted, and, in addition, there were 42 in the hospital on December 31, 1914. Of these 654 infants, 146 were under three months of age, 146 were between three and six months, 212 were between six and twelve months, and 150 were between twelve and fifteen months. The number of deaths was 161. At the end of the year, 52 infants were still under treatment. Of the remaining 441, 25 were discharged to the Asylum for Women and Children, 398 were sent home, eight were placed under the care of the Boarding-out Officer, and ten were placed in various institutions.

Dr. F. G. N. Stephens, in his report, calls attention to the deplorable fact that in a very large number of cases the babies were brought in in a desperate condition. One-third of the deaths took place within 48 hours of admission. There is much well-founded opposition to the treatment of infants in hospitals or homes, where the little patients come in close contact with one another. While we recognize the grounds for this objection, it is obvious that in many of the cases dealt with at the Renwick Hospital, the alternative to hospital treatment is not a satisfactory one. If the infants are allowed to lapse into so hopeless a condition in their homes that death becomes inevitable within a few hours of admission, it is evident that adequate measures cannot exist outside for the safeguarding of infant life. The excellent work of the hospital was hampered by the fact that Drs. Mills and Sabiel left Australia on military duty, and Dr. Selwyn Harrison has undertaken military duty in New South Wales. In addition, Dr. E. Buckley has left for Europe, where she is performing valuable work.

The disease which called for treatment most frequently was gastro-enteritis. No less than 470 infants were admitted for this condition. The patients were under three months in 105 cases, between three months and six months in 126 cases, between six and twelve months in a further 149 cases, and between twelve and eighteen months in 90 cases. Death took place in 95 infants. The disease appears to have been most fatal to the infants between three and six months of age. Broncho-pneumonia affected 74 infants, and proved fatal 24 times. The only other disease met with frequently was morbilli, of which there were 14 cases. Three of the little patients died.

The Asylum for Women and Children.

This institution has been established for the care of women pending confinement, of mothers with young babies and of babies in good health. While the importance of the institution to the women awaiting labour and to mothers without friends or homes to receive them cannot be overrated, it is clear that the congregation of many infants in the Asylum is distinctly dangerous. The Managers of the Asylum, however, attempt to pass the mothers with infants on to other places at the earliest moment possible. When domestic employment can be found for the friendless women, care is taken that reasonable remuneration is paid to them.

During the course of the year, 499 women and 420 infants were under care. Of the women, 159 were sent to the Royal Hospital for Women for confinement, 36 were sent to homes or other institutions, and 269 were discharged to their relatives or friends, or placed in situations. An epidemic of morbilli endangered the lives of a number of the babies, and gave the Medical Officer considerable anxiety.

Out-Door Relief and Stores Department.

This branch of the activity of the Benevolent Society is purely charitable, and has only an indirect medical aspect.

The war conditions have increased the need of the poorer section of the community, and, in consequence, a very much larger number of persons and families have come under its operations. In all, 5,949 cases were considered, 3,237 houses were visited, and 3,273 fresh applications were received. In 677 cases, assistance was renewed, and a total of £5,399 was spent on the deserving poor.

The report concludes with a list of subscribers and donors. The work undertaken by this excellent Society is so humane that we feel impelled to bring it to the notice of those who have comfortable homes and well-stocked larders. Even in these times, when luxuries are being dispensed with in order that the many national funds may receive support, we are sure that something will be available for the Benevolent Society of New South Wales.

INSANITY IN QUEENSLAND.

The report of the Inspector of Hospitals for the Insane of Queensland for the year 1914 contains so much information of importance and interest that difficulty must be experienced in any attempt to recite the salient points in the course of a short article. The volume comprises 46 pages, and is excellently illustrated both by photographs of portions of the Goodna Hospital, the Willowburn Hospital, and the Ipswich Hospital, and also ground plans of various new departments in these hospitals. The letter-press contains detailed reports for the year from Goodna, Toowomba, and Ipswich, including numerous tables and a general report by the Inspector of Hospitals for the Insane.

The population of the State on September 30, 1914, was 683,514. Of this number 2,448 persons were certified as insane. This represents 3.58 per 1,000 of population. The proportion of certified insane to the total population has gradually increased. Forty years before it was 1.83 per 1,000; since 1876 it has exceeded 2 per 1,000. The figure approached 3 in the early nineties, and has varied between 3.53 and 3.95 during the final 12 years. The highest rate was in 1909. Dr. Bryam Ellerton ascribes the increase to the greater facilities for bringing patients to the mental hospitals, the greater readiness on the part of the relatives in sending their mentally afflicted to the institutions, the greater reluctance on the part of the relatives to deal with the patients in their own homes, and lastly the growing stress in life, mental worry and anxiety in the increased competition of modern life.

Since January 1, 1860, 11,646 persons have been certified and admitted as patients into the hospitals for the insane. Of this number, 1,566 were admitted more than once. It therefore appears that 10,080 persons were dealt with during a period of 55 years. During the same period 4,857 patients were discharged as recovered. This yields a recovery rate of 41.7%. From these figures it would appear that the readmissions were made in respect of 687 patients. Of the 10,080 patients, 3,579 died in the hospitals; this yields a mortality of 35.8%. A highly satisfactory statement is made that only 5 of all these patients were discharged because they were not insane. This is a most reassuring fact.

In 1914 the proportion of certified insane to 10,000 of population was 35.8, while the proportion of admissions to the same number of population was 7.6.

The number of admissions during the year 1914 was 520, of which 452 were first admissions and 68 readmissions. The number of patients who recovered during the year was 246, and the number of deaths was 181. On December 31, 1914, there were 2,448 patients resident in the various hospitals.

The Hospital for the Insane, Goodna.

The total number of patients under care in the Hospital for the Insane at Goodna during the year 1914 was 1,767. Of these 441 were admitted during the year, either as fresh patients, as readmissions, or as transfers. The number of deaths was 134, and in addition 236 patients were discharged or transferred to other hospitals. Sixteen patients were absent on leave on December 31, 1914. There was an increase in the daily average of persons in residence of 60 as compared with the year 1913.

The cause of the mental affections were ascertained in 408 of the 441 patients during the year. It appears that 534 causes were discovered in these cases. Among the predisposing causes a previous attack is entered 87 times, senility 54 times, congenital causes 38 times, heredity 35 times, climateric 13 times, and adolescence 8 times. The exciting causes are divided into moral and physical. Among the former, domestic trouble was noted 34 times, religious excitement 16 times, isolation 14 times, financial worry 8 times, mental anxiety and overwork 6 times, and love affairs 4 times. Alcohol was the most frequent active cause among the physical agents, and appears 112 times in the list. Bodily disease comes next with 76 instances, epilepsy is third with 23, while syphilis, masturbation, accident, the puerperal condition, starvation, drug habits, the effect of operation and sunstroke followed in the order of frequency given. The Superintendent points out that no reliance can be placed on the figures dealing with heredity, inasmuch as the relatives frequently give inaccurate information in regard to the mental condition of their antecedents.

The form of mental disorder in patients admitted during the year was some form of maniacal depressive insanity in 142 males and 110 females. The most common variety was acute mania. Alternating insanity comes next, and secondary dementia, subacute mania, acute melancholia, recurrent mania and chronic melancholia are among the most frequent. Of other forms of insanity, mania *á potu* occurred 54 times, senile dementia 51 times, paranoia 15 times, general paralysis of the insane 14 times, and dementia 4 times. Of the congenital form there were 22 instances of imbecility without epilepsy, 14 of imbecility with epilepsy, and 5 of idiocy.

Approximately one-third of the patients admitted were in apparently good health, one-third were in indifferent health, and one-third were in bad health and exhausted condition.

The two youngest patients admitted were under 5 years of age. One other was between 5 and 10 years of age; ten others were under 15, and 26 were under 20. The majority were in the third, fourth, fifth and sixth decades of life. There were 35 patients between 60 and 70 years of age, 23 between 70 and 80, and 9 between 80 and 90. In three cases the ages of the patients was unknown.

Of the patients who were discharged, 210 had recovered, 2 were relieved, and 24 were transferred to other institutions. Of those discharged recovered, 7 had been in the institution for a period under five years, 10 had been in for less than three years, 19 for over one and under two years. In 21 cases the length of residence was under one month, in 67 it was under three months, in 50 it was under nine months, and in 22 it was under a year. Three patients between the ages of 80 and 90 recovered.

Six patients succeeded in escaping from the hospital, and one evaded recapture. This patient is said to have been well on the road to recovery, and has since been written off the books as "discharged recovered."

The death-rate calculated on the average number of patients in residence was 9.82%. This rate is higher than the rate recorded in 1913, and lower than that of 1912.

Over 50% of the patients who died had been in hospital less than nine months. One hundred and fourteen out of 134 were between 30 and 80 years of age, the greatest number of deaths taking place in the sixth decade. Of the cause of death, senility appears 27 times in the table. The next in frequency is general paralysis of the insane. In 12 instances chronic nephritis was the cause, and in 10 valvular disease of the heart, and in 8 fatty degeneration of the heart was found. Seven patients died of lobar pneumonia, and the same number of tuberculosis. Six patients died in the epileptic state. Five deaths were ascribed to the exhaustion of mania, 5 to dysentery, 4 to pyelonephrosis. The remaining causes of death were not repeated more than 3 times.

Only 40 post-mortem examinations were performed during the year. The smallness of the number was due to the difficulty of obtaining the services of a substitute for the Senior Assistant Medical Superintendent, and also to the fact that in many cases the relatives removed the bodies of the patients soon after death.

One patient was admitted during the course of pregnancy and gave birth to a male child. The child was removed 18 days after its birth.

A full description is given of the recreation, amusements, and employment of the patients.

Hospital for the Insane, Toowoomba.

The number of patients under care in the Toowoomba Hospital for the Insane during the year 1914 was 835. Of these 81 were admitted during the year, 76 of whom were admitted for the first time. In 20 cases the patients were admitted less than three months after the onset of the first attack. In 13 they were admitted within 12 months of the onset of the attack.

The diagnosis in the cases of patients admitted during the year was recent mania in 22, recurrent mania in 12, recent melancholia in 12, congenital deficiency without epilepsy in 4, delusional mania in 8, mania *á potu* in 6, chronic mania in 3, primary dementia in 3, epileptic insanity in 2, senile mania in 2, recurrent melancholia in 2, congenital deficiency with epilepsy in 1, chronic melancholia in 1, melancholia *á potu* in 1, senile dementia in 1 and organic dementia in 1. The general health was good in 30, indifferent in 23 and bad in 28.

The predisposing causes include 19 instances of previous attacks, 12 instances of ascertained heredity, 5 instances of congenital defect, and 3 instances of senility. Among the exciting causes, intemperance in drink is mentioned 12 times, mental anxiety and worry 6 times, adverse circumstances 4 times, domestic troubles 3 times, love affairs twice, and isolation once. Parturition, the puerperal state, and lactation acted as exciting causes 4 times, and bodily diseases 3 times. In two cases epilepsy was the cause.

Thirty patients died, 34 were discharged recovered, 11 were discharged relieved, 2 were discharged not improved, and 1 was transferred to another hospital. The death-rate calculated on the average number of patients resident in the hospital was 3.97. The recovery rate calculated on the number of admissions was 42%. Diseases of the nervous system formed the cause of death of 8 patients; disease of the respiratory system killed 7 patients. One patient died of enteric fever, and two committed suicide.

The majority of the patients discharged recovered were in the hospital for less than three months. In three instances recovery took place after the patient had been in the hospital over 1 year and under 2. An equal number of recoveries took place in the third, fourth and fifth decades of life.

Hospital for the Insane, Ipswich.

The report of the Acting Medical Superintendent of the Insane, Ipswich, is a small document. It appears that 314 persons were under care during the year. Of these 290 were in the hospital on January 1, 1914, and 24 were transferred from Goodna Hospital during the course of the year. Two patients were discharged recovered, 1 was transferred to another hospital, and 17 died. In 4 cases the death was due to pulmonary tuberculosis, in 2 to stricture of the urethra, in 2 to heart disease, and in 1 each to fatty degeneration of the heart, acute lobar pneumonia, carcinoma epithelioma of the neck, sarcoma of the femur, tubercular of the stomach, acute dysentery, miliary tuberculosis, peritonitis and senile decay. Three of these patients had been in the asylum for 20 years or more. In 2 cases death took place within 6 months of admission, and in 2 further cases it took place in the second year of residence.

One male patient escaped, but was recaptured. Some further details are appended.

Obituary.

KENDALL HAMMAND.

It was our painful duty to record, in *The Medical Journal of Australia*, of March 4, 1916, the death of Captain K. Hammand. The news of his death arrived by cable, and was shorn of all details, "Kendall Hammand; died of wounds, Cairo." Where and when, under what circumstances and why, the future may yet disclose. That inhumane monster—war,—continues to claim of our best!

Kendall Hammand graduated at the University of Sydney in 1907. He had been handicapped by the early death of his father. The premature explosion of a torpedo at Middle Head, Port Jackson, in the early 'eighties had robbed his mother of an excellent husband and her three sons of a good father. After graduation, Hammand served as Resident Medical Officer at the Toowoomba Hospital. His exceptional ability and quiet perseverance were recognized by the members of the medical staff, with whom he was deservedly popular. Two years later he left Queensland and journeyed to London, where he spent some years. At first he turned his attention to surgery, and prepared himself for the examination for the Fellowship of the Royal College of Surgeons, when his health gave way, and he was forced to interrupt his studies. It is said that the climate of London was too much for him. He obtained several "house" appointments in the London hospitals before he finally returned to Australia.

Hammond always had a *penchant* for the Darling Downs. He therefore chose Clifton, and ,having bought a practice there, rapidly built up a very good connexion. His qualities fitted him eminently for this class of practice, and his patients were greatly attached to him. He married during this time, but had no family.

He had an intense love for his *alma mater*, the Medical School of Sydney. He used to boast that he had never seen any teaching in other medical schools to equal that of Sydney.

Captain Hammand and his only surviving brother volunteered for military service during the early stages of the war. May the earth lie lightly over one who gave his all for his King and Country!

NOTICE TO MEMBERS OF THE VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

From financial considerations, the Council of the Victorian Branch of the British Medical Association has decided that for the future, in lieu of the ordinary receipt for subscriptions paid, the Secretary will issue a weekly statement to all those whose subscriptions have been paid during the preceding week.

By this arrangement a large amount of clerical work will be curtailed, and there will be a considerable monetary saving in postage and duty stamps.

Members are requested to make all cheques payable to order, and thus obviate the necessity of any receipt being given.

REPLIES TO CORRESPONDENTS.

In reply to *Enquirer*, we are in a position to state on good authority that the hotels mentioned in his communication, namely, the "Imperial" at Mount Victoria, and the "Carrington" at Katoomba, can be thoroughly recommended. We are informed that the sanitary arrangements are excellent, that the hotels are comfortable, and that persons wishing to escape from the bustle and turmoil of the city will find pure air, rest and quiet in either of these establishments.

Books Received.

S. WEIR MITCHELL, M.D., LL.D., F.R.S., 1829-1914, Memorial Addresses and Resolutions, 1914. Philadelphia: The College of Physicians, Philadelphia. Demi 8vo. pp. 155.

THE PRIMARY LUNG FOCUS OF TUBERCULOSIS IN CHILDREN, by Dr. Anthon Ghon, English Edition, Authorized Translation by D. Barty King, M.A., M.D., M.R.C.P., 1916. London: J. & A. Churchill; Royal 8vo., with 72 illustrations, pp. 172. Price, 10s. 6d. net.

PAINLESS CHILDBIRTH EUTOCIA AND NITROUS OXID-OXYGEN ANALGESIA, by Carl Henry Davis, A.B., M.D., 1916. Chicago: Forbes & Company: Crown 8vo., pp. 134. Price, 4s. 6d.

WHEELER'S HANDBOOK OF MEDICINE, by William R. Jack, B.Sc., M.D., F.R.F.P.S.G., 1916. Edinburgh: E. & S Livingstone; Crown 8vo., pp. 552. Price, 8s.

Medical Appointments.

Dr. F. W. Cave has been appointed Officer of Health for the Balmoral Riding, Shire of Wannon, Victoria, in place of Dr. S. Connor.

His Excellency the Governor has appointed Arthur Male, Esq., a member of the Senate of the University of Western Australia, in the place of the Hon. Frank Wilson.

The announcement is made in the *South Australia Government Gazette* of March 9 that the following ladies and gentlemen have been appointed to constitute the Board of Management of the Adelaide Hospital: Mrs. Elizabeth Cullen, Mrs. Helen Edwards, Mrs. Elizabeth Webb Nicholls, The Honourable Alfred Catt, J.P.; William Green Coombs, J.P.; Edward Frinsdorf, J.P.; The Honourable William Humphrey Harvey, M.L.C., Alfred William Hill, M.D., Francis Walter Lundie, J.P., Ivor MacGillivray, M.P., James Grey Moseley, M.P., Thomas Boden Merry, J.P., Robert Phillips J.P., Benjamin Poulton, M.D., Ch.B., M.R.C.S., William Alfred Robinson, J.P., and Richard Sanders Rogers, M.A., M.D.

Dr. S. A. Smith has been appointed a member of the Police Medical Board, New South Wales, during the absence from the State of Dr. Sinclair Gillies.

The retirement of Mr. W. M. Hamlet, F.I.C., F.C.S., from the post of Government Analyst of New South Wales is announced in the *New South Wales Government Gazette* of March 10, 1916.

Mr. J. R. V. Anderson has been appointed Public Analyst for the city of Bendigo, in the place of Messrs. Frederic Dunn and John Herbert Dunn.

Dr. Robert Forsyth has been appointed Public Vaccinator for the Metropolitan District of Surrey Hills, Victoria.

Dr. S. G. Skewes has been appointed Public Vaccinator for the Midland District of Wood's Point, Victoria.

Dr. John Lee Atkinson has been appointed Public Vaccinator for the North-Western District of Birchip, Victoria.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xiii.

Texas District Hospital, Queensland, Medical Officer.

Brisbane Hospital, Resident Medical Officer.

Hobart General Hospital, Junior House Surgeon.

Renwick Hospital for Infants, Three Honorary Assistant Physicians.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
WESTERN AUSTRALIA. (Hon. Sec., 230 St. George's Terrace, Perth.)	Swan District Medical Officer. All Contract Practice Appointments in Western Australia.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	The F.S. Medical Assoc., Incorp., Adelaide.
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Department of Public Instruction—New Appointments as Medical Officer, Ophthalmic Surgeon, Ear, Nose and Throat Surgeon, Physician. Australian Natives' Association. Balmain United F.S. Dispensary. Canterbury United F.S. Dispensary. Goulburn F.S. Association. Leichhardt and Petersham Dispensary. M.U. Oddfellows' Med. Inst., Elizabeth Street, Sydney. Marrickville United F.S. Dispensary. N.S.W. Ambulance Association and Transport Brigade. North Sydney United F.S. People's Prudential Benefit Society. Phœnix Mutual Provident Society. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Orange. F.S. Lodges at Parramatta, Penrith, Auburn, and Lidcombe. Newcastle Collieries — Killingworth, Seaham Nos. 1 and 2, West Wallsend.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Brisbane United F.S. Institute. Croydon Hospital. Laidley Hospital, Medical Officer.
NEW ZEALAND: WELLINGTON DIVISION. Hon. Sec., Wellington.)	F.S. Lodges, Wellington, N.Z.

Diary for the Month.

Mar. 21.—N.S.W. Branch, B.M.A., Executive and Finance Committee, Ethics Committee.
Mar. 24.—Q. Branch, B.M.A., Council.
Mar. 28.—N.S.W. Branch, B.M.A., Medical Politics Committee, Organization and Science Committee.
Mar. 29.—Vic. Branch, B.M.A., Council.
Mar. 30.—South Aust. Branch, B.M.A., Branch.
Mar. 30.—N.S.W. Branch (Return of Ballot Papers for Election of Council of Branch).
Mar. 31.—N.S.W. Branch, B.M.A., Annual Meeting.
Apr. 4.—N.S.W. Branch, B.M.A., Council (Quarterly).
Apr. 5.—Vic. Branch, B.M.A., Branch.
Apr. 7.—Q. Branch, B.M.A., Branch.
Apr. 12.—North-Est Med. Assoc. (N.S.W.), Annual Meeting, Lismore.
Apr. 13.—Vic. Branch, B.M.A., Council.
Apr. 14.—S. Aust. Branch, B.M.A., Council.
Apr. 14.—N.S.W Branch, BM.A., Clinical.
Apr. 15.—Northern Suburbs Med. Assoc. (N.S.W.).
Apr. 18.—Eastern Suburbs Med. Assoc.
Apr. 18.—N.S.W. Branch, B.M.A., Executive and Finance Committee, Ethics Committee.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.